

The 8th World Congress of Herpetology

第八届世界两栖爬行动物学大会



Hangzhou, China

15-21 August 2016

Handbook

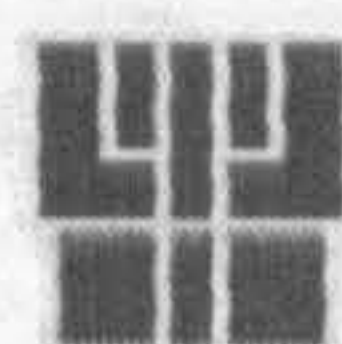
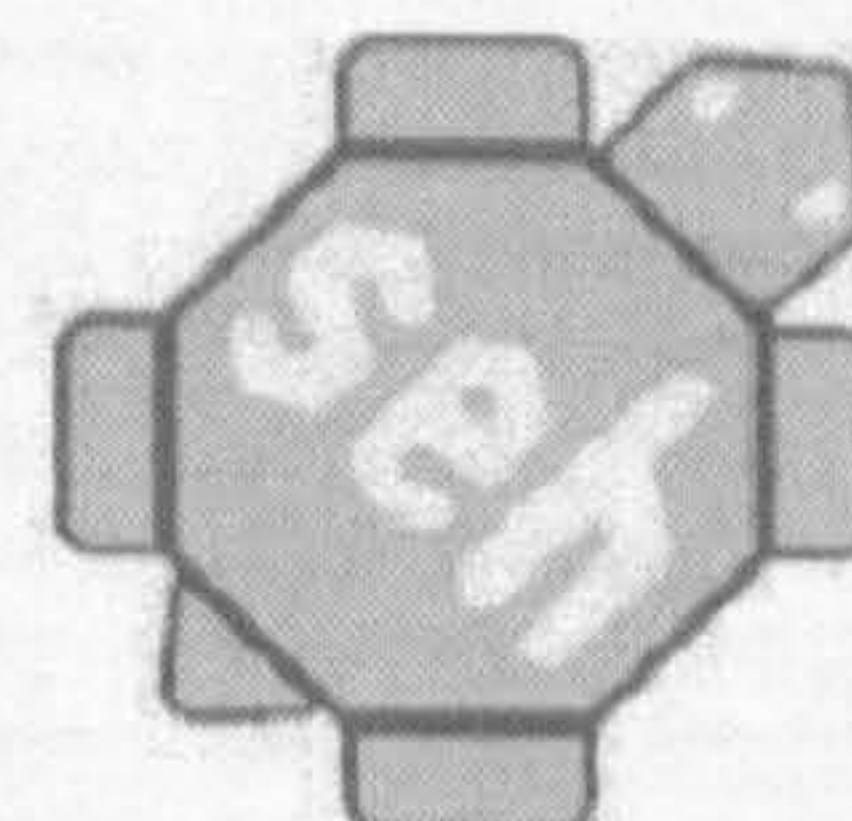
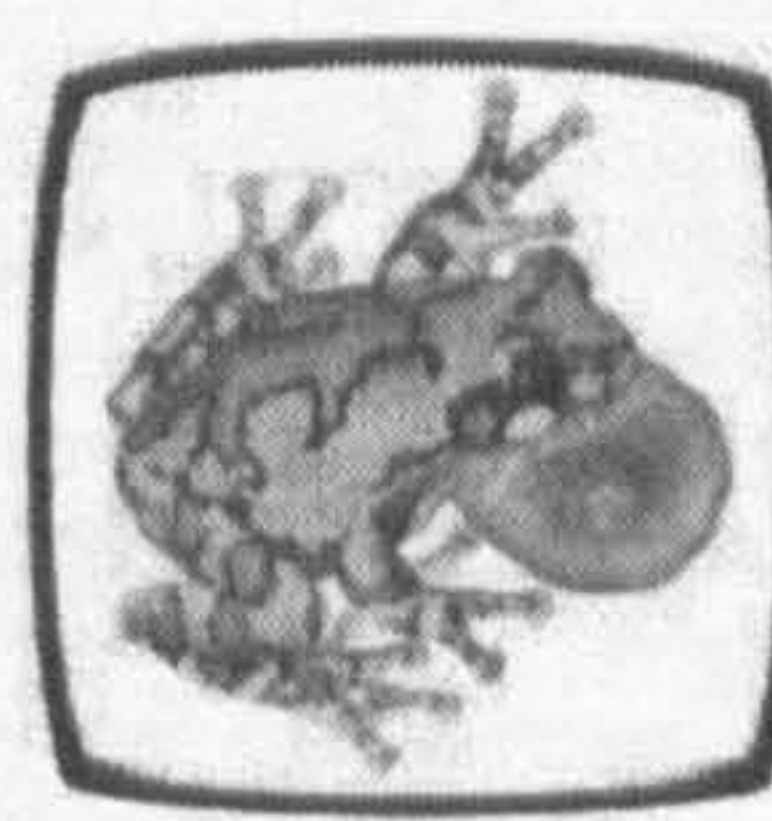
15-21 August 2016

New Century Grand Hotel Hangzhou

Hangzhou, China

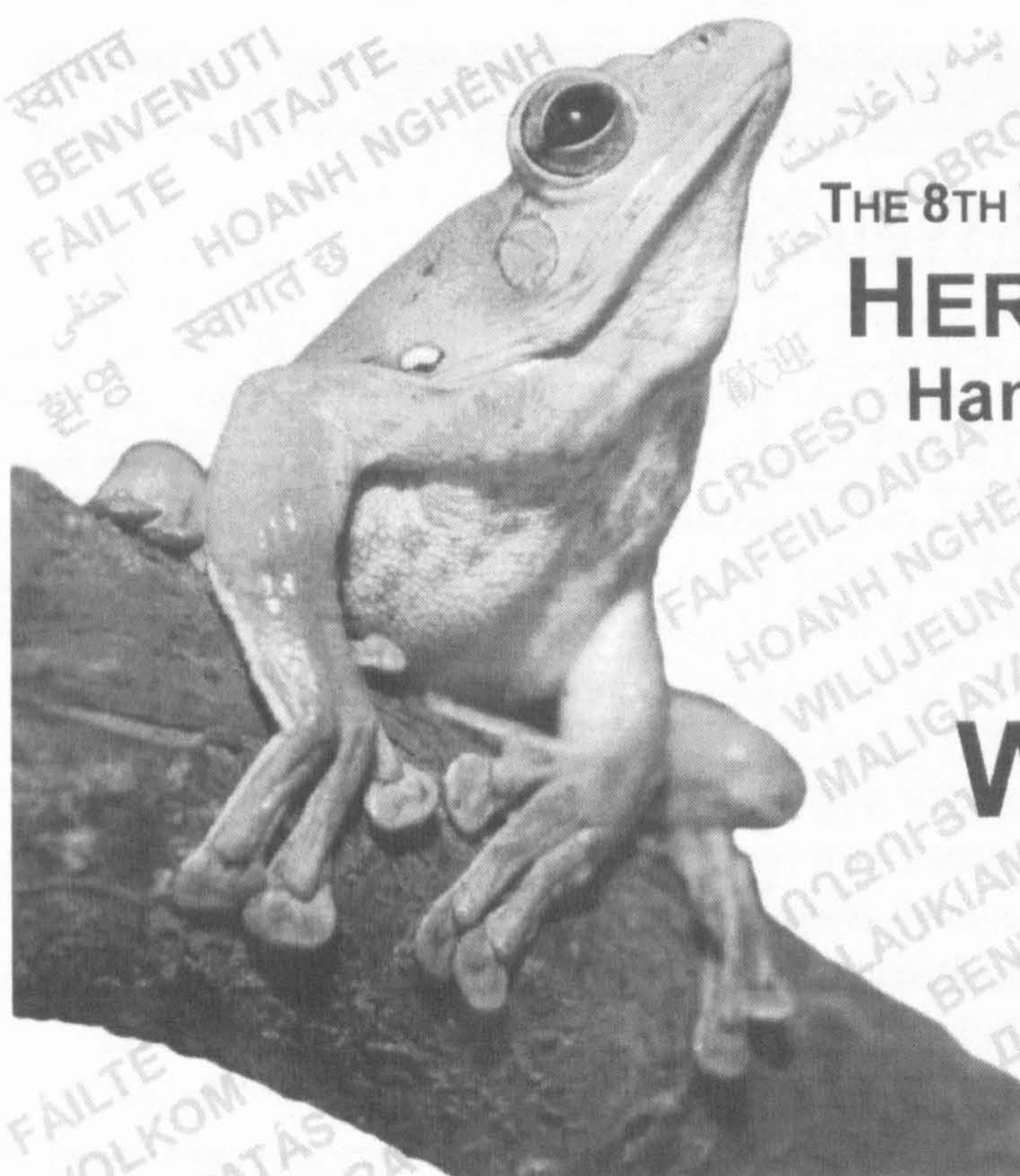
www.wch2016hangzhou.com

WCH8 thanks its hosts and sponsors



鼎益生物





THE 8TH WORLD CONGRESS OF HERPETOLOGY Hangzhou, CHINA

Welcome



Chinese Herpetological Society

China has a long history of herpetological research. Studies conducted in China have contributed significantly to our present day understanding of herpetology, global biodiversity and life science. China currently has a spirited and collegial herpetological community that extends from coastal to inland regions, and from the northernmost to southernmost parts of the country. Chinese researchers from across the country have established a significant international presence in diverse areas of herpetology. The Chinese Herpetological Society (CHS) was established in 1982 and is the only natural history society in China devoted specifically to herpetology.

Congress Chair Welcome



I am pleased to welcome herpetologists from all over the world to the 8th World Congress of Herpetology (WCH8). This is the first time to have a WCH in East Asia and I am certain that all attendees will appreciate our host city, Hangzhou, which offers a wealth of scientific resources, historic figures, cultural heritages and entertainment. Amphibians and reptiles provide ideal model systems for investigating a broad range of biological issues and, for many questions, they can provide more feasible and logistically suitable study organisms than can other terrestrial vertebrates. This realization has promoted a massive increase in the research effort devoted to herpetology worldwide, and I

believe that the WCH8 has its unique position in surveying and integrating the latest advances in a great variety of scientific disciplines and making new conceptual and professional connections. Chinese herpetology has enjoyed a long and distinguished history in many research areas of amphibians and reptiles and is maintaining a wide international network of collaborative studies. The hosts, participating societies, sponsors and organizers of the WCH8 have been committed to enable as many herpetologists to attend the Congress and present their studies. I thank them all for their hard work and dedication, and wishes the WCH8 a great success.

Ya-ping Zhang
Academician of Chinese Academy of Sciences
Vice President, Chinese Academy of Sciences

WCH8 Organizer Welcome



It is my great pleasure to welcome more than 700 delegates from more than 55 countries to the WCH8 for a common interest in herpetology.

Your coming highlights the congress and the host city. With contributions from diverse geographic regions, animal taxa and research disciplines, the WCH8 offers a scientific program that covers all empirical, theoretical and applied fields of herpetology. The WCH8 has 24 symposia and 13 open sessions. It also has a poster session and evening social events. The WCH8 could not have been possible

without our local organizing committee, student volunteers, generous sponsors, and the enthusiastic support of China Zoological Society, Chinese Herpetological Society, International Society for the Study of Amphibians and Reptiles. Enjoy!

Xiang Ji
Chair, Organizing Committee for WCH8
President, Chinese Herpetological Society



Scientific Committee

Ya-ping Zhang (Chair), China
 Natalia Ananjeva, Russia
 David Bickford, Singapore
 Aaron Bauer, USA
 Juan Calvete, Spain
 Susana Clusella-Trullas, South Africa
 Claudia Corti, Italy
 Allison Cree, New Zealand
 Indraneil Das, Malaysia
 Taran Grant, Brazil
 Richard Griffiths, UK
 Jean-Marc Hero, Australia
 David Hillis, USA
 Nora Ibargüengoytia, Argentina
 Robert Jehle, UK
 Xiang Ji, China
 Scott Keogh, Australia

Shai Meiri, Israel
 Akira Mori, Japan
 Robert Murphy, Canada
 Gabriela Parra-Olea, Mexico
 Alexander Pyron, USA
 Michael Ryan, USA
 Lin Schwarzkopf, Australia
 Richard Shine, Australia
 Kenneth Store, Canada
 Roger Thorpe, UK
 Raoul Van Damme, Belgium
 Miguel Vences, Germany
 Tobias Uller, Sweden
 Richard Vogt, Brazil
 Marvalee Wake, USA
 John Wiens, USA

Local Organizing Committee

Xiang Ji (Chair), Nanjing
 Hong Li (Secretary), Nanjing
 Jing Che, Kunming
 Qiang Chen, Lanzhou
 Qiu-sheng Chen, Nanjing
 Xiao-hong Chen, Xinxiang
 Wei-guo Du, Beijing
 Jin-zhong Fu, Chengdu
 Bao-rong Geng, Fuzhou
 Jian-fang Gao, Hangzhou
 Song Huang, Huangshan
 Jian-ping Jiang, Chengdu
 Jia-tang Li, Chengdu
 Yi-ming Li, Beijing
 Gang Liang, Shaanxi
 Long-hui Lin, Hangzhou

Zhi-hua Lin, Lishui
 Hong-liang Lu, Hangzhou
 Cui-juan Niu, Beijing
 Yan-fu Qu, Nanjing
 Ding-qi Rao, Kunming
 Hai-tao Shi, Haikou
 Hong-ying Sun, Nanjing
 Ye-zhong Tang, Chengdu
 Yue-zhao Wang, Chengdu
 Hua Wu, Wuhan
 Xiao-bing Wu, Wuhu
 Zheng-jun Wu, Guilin
 Peng Zhang, Guangzhou
 Wen-ge Zhao, Harbin
 Xiao-mao Zeng, Chengdu

Thank You for Making WCH8 a Great Success!



Table of Contents

General Information	1-4	Special Sessions	10
Special Events	5	Program	11-41
Plenary Speakers	6-8	Exhibitor Information	42
Mini-plenary Speakers	9	Note pages	43-47





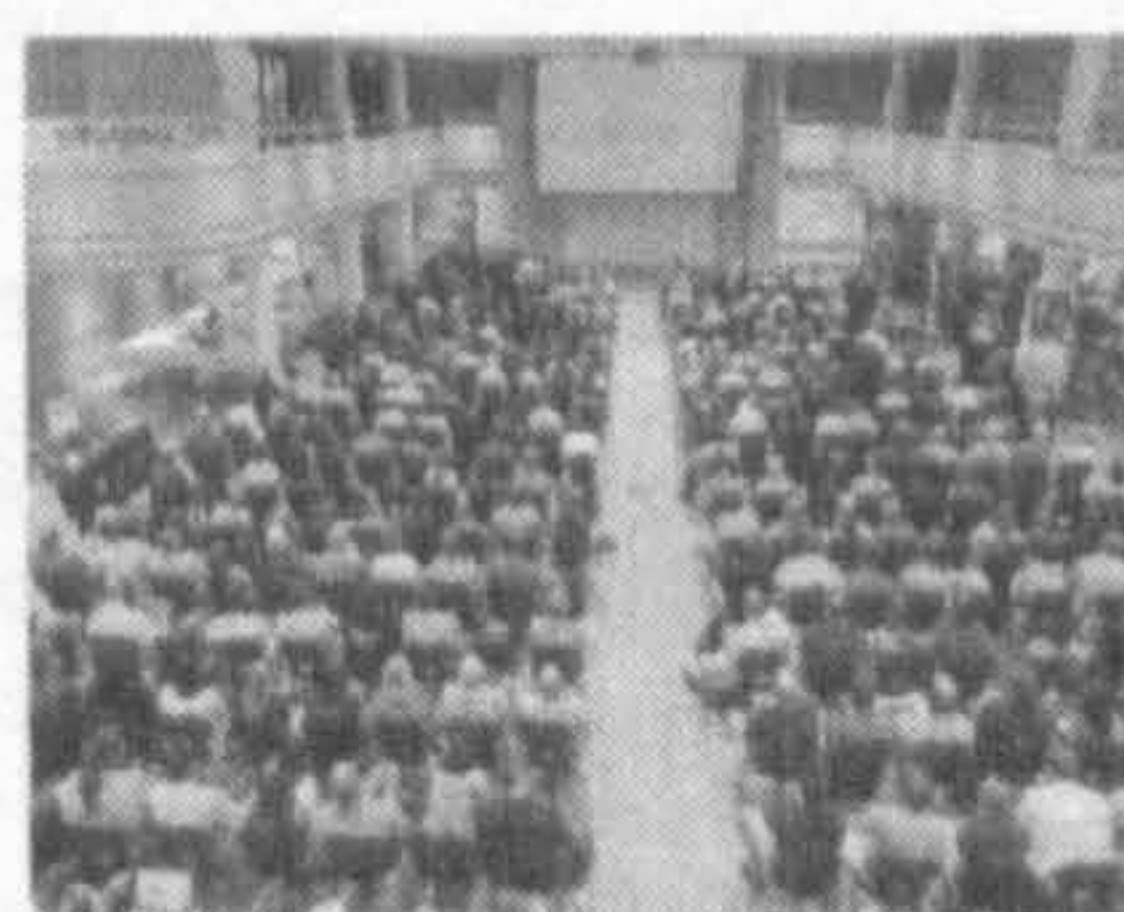
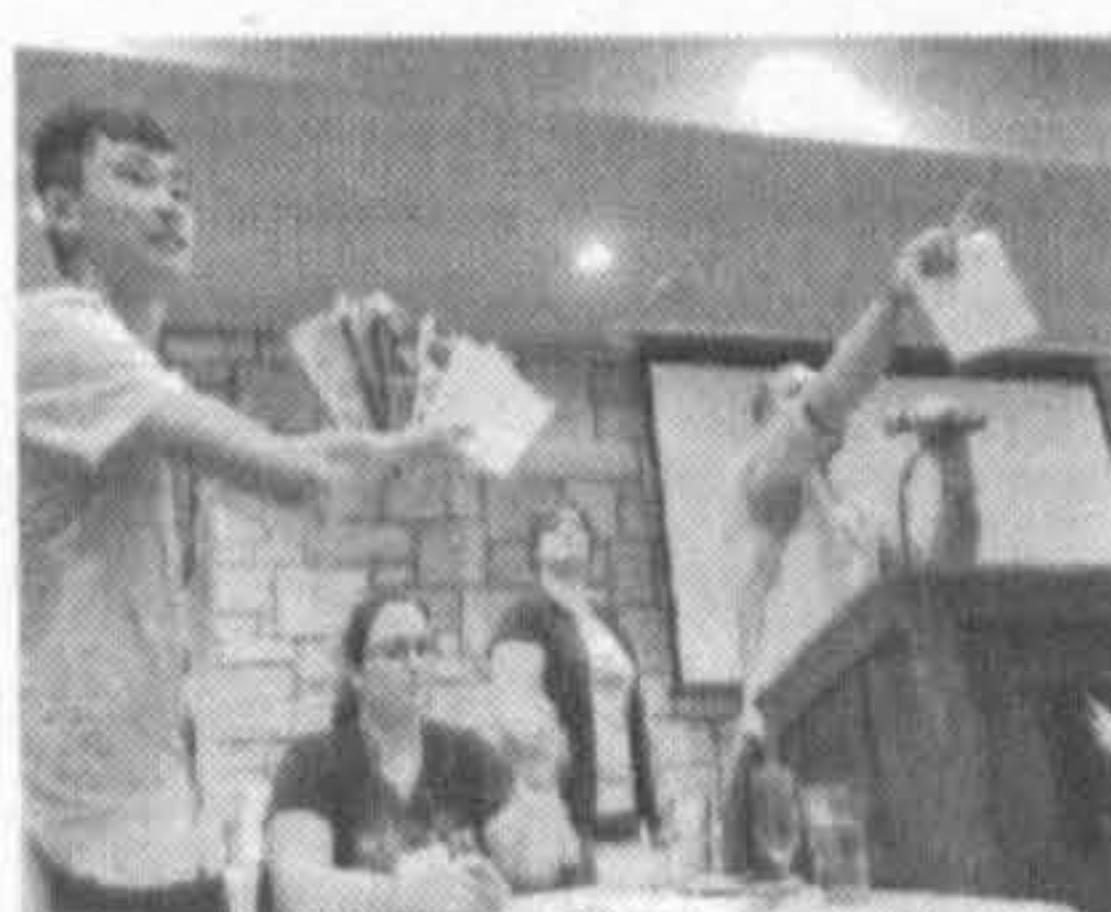
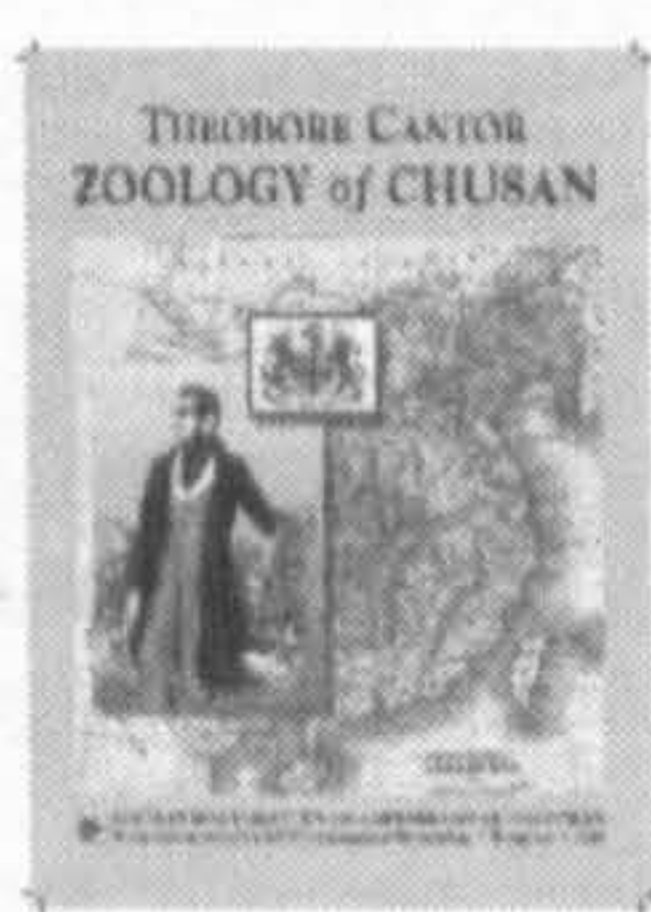
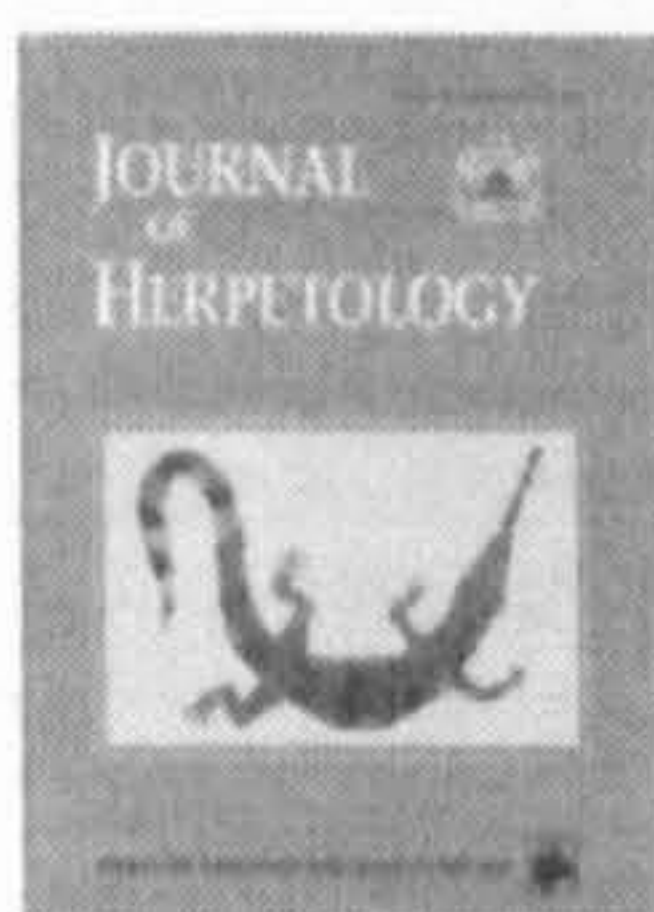
SOCIETY FOR THE STUDY OF AMPHIBIANS AND REPTILES

Publisher of *Journal of Herpetology*, *Herpetological Review*, *Herpetological Circulars*,
Catalogue of American Amphibians and Reptiles, and three series of books,
Facsimile Reprints in *Herpetology*, *Contributions to Herpetology*, and *Herpetological Conservation*

SSAR SALUTES THE CHINA CONGRESS

As the largest global academic herpetological society, SSAR — an association of biologists from more than 65 countries — is excited to be part of the Eighth World Congress of Herpetology. SSAR is a not-for-profit organization established to advance research, conservation, and education concerning amphibians and reptiles. Membership is open to all persons with an interest in herpetology — professionals and serious amateurs alike. One of our primary goals is to facilitate communication among herpetologists from all disciplines and all countries, and we are confident that the WCH in Hangzhou will play a key role in building friendships and sharing knowledge across international boundaries. SSAR has been an active participant in every World Congress held to date and has provided a facsimile reprint to every participant. This year delegates to the Congress will find in their registration materials a color copy of *The Zoology of Chusan* by Theodore Cantor, a rare and important early work on the vertebrates of Zhoushan Island in Hangzhou Bay. In addition, SSAR is sponsoring a special audio-visual program, *Amphibians of the Appalachians*, which will be held late Friday afternoon, August 19 (see notice on the reverse side of this page).

PUBLICATIONS. SSAR produces seven different publication series: *Journal of Herpetology*, *Herpetological Review*, *Facsimile Reprints in Herpetology*, *Contributions to Herpetology*, *Herpetological Circulars*, *Herpetological Conservation*, and the *Catalogue of American Amphibians and Reptiles*, which covers the entire Western Hemisphere. The first two serials are quarterly journals, both in full color throughout and each containing more than 700 pages annually; these are included in Society membership (see below). The *Catalogue* is an open-access series of species accounts that are issued at regular intervals. The other four series consist of books or booklets that are published at irregular intervals and are available for purchase; members receive discounted prices. For a complete price list of Society publications, consult SSAR's website at: SSARherps.org; click on "Publications," then "SSAR Bookstore" at the bottom of that web page.

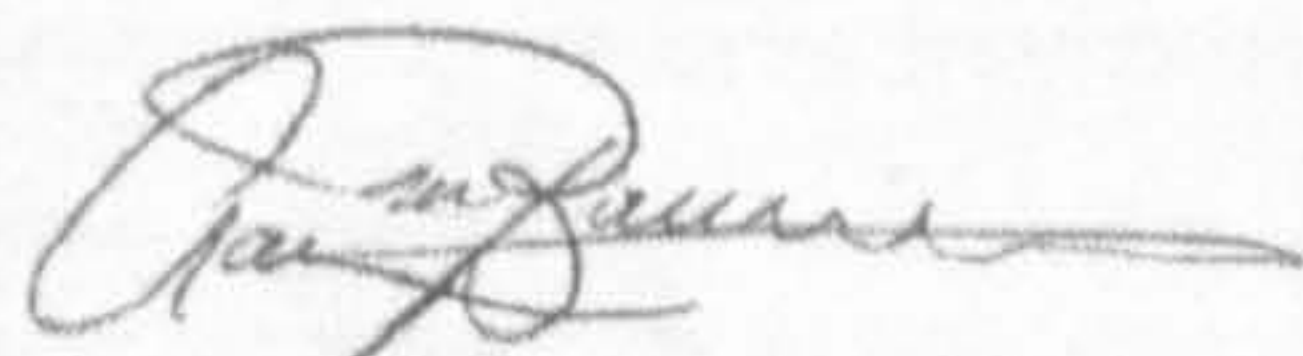


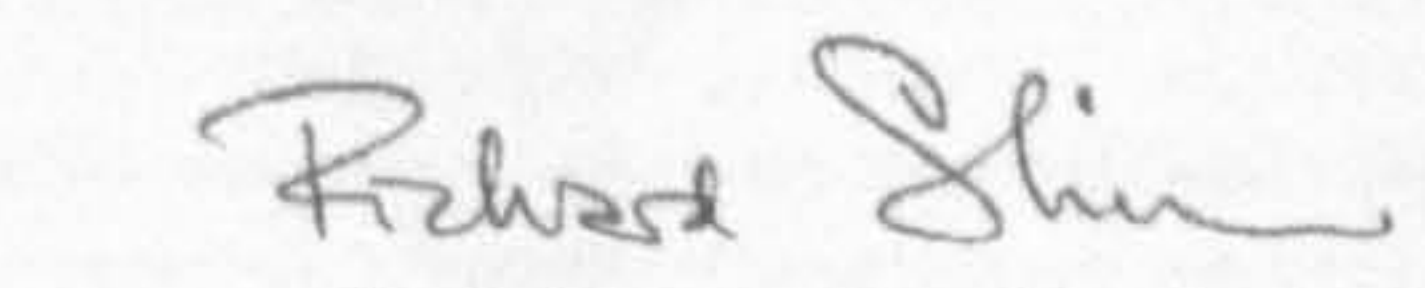
ACTIVITIES. Society activities are coordinated by officers, editors, or committees — including many international members. Annual meetings are held each summer at conference centers in North America as part of the Joint Meeting of Ichthyologists and Herpetologists, a multi-society organization. SSAR occasionally holds separate meetings on university campuses to provide smaller, more interactive meetings for our younger members. Contributed paper sessions, symposia, poster sessions, workshops, field trips, audio-visual programs, displays of living amphibians and reptiles, and academic and commercial exhibits make this four-day event the major professional herpetological meeting each year. Special competitive funding is available for students to attend these events.

MEMBERSHIP. All regular members of SSAR are entitled to vote for Society officers and receive *Journal of Herpetology* and *Herpetological Review* at no additional charge. *JH* is one of the world's leading journals of vertebrate biology and in 2009 was the only herpetological serial to be selected among the "100 Most Influential Journals of Biology and Medicine Over the Last 100 Years." *JH* now publishes more herpetological papers than any other journal in the world. *HR* has become a leading journal in its own right, generally for shorter contributions and news notes, and contains field and lab techniques, conservation, herpetoculture, book reviews, commercial ads, and meetings, among many other topics. In recent years, *HR* has become the principal outlet for the rapid reporting of geographic distribution, natural history notes, and emerging pathogens. Members may publish in both serials without paying page charges and may publish color illustrations with their articles at no charge. Members also receive discounts on other Society publications and on registration fees at the annual meetings. For current membership fees, go to the SSAR website at: SSARherps.org; simply click on "Join SSAR." Annual dues **world-wide** for professionals are now US\$95.00 and \$45.00 for students, but there are also several other categories of membership (details on our website).

WE INVITE YOU TO JOIN S.S.A.R.!



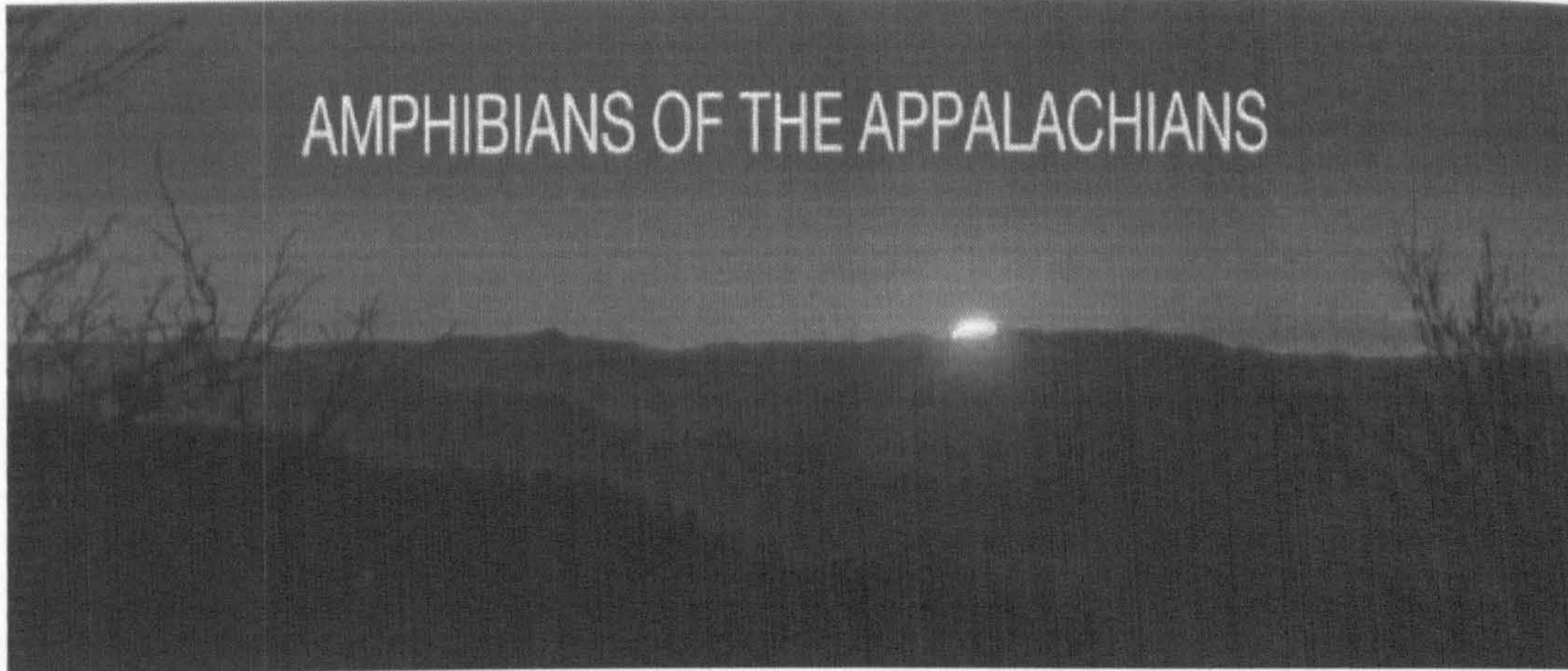

Aaron M. Bauer, President
Villanova University (USA)


Rick Shine, President-elect
University of Sydney (Australia)



Special SSAR Audio-visual Show at World Congress

To be shown on Friday evening, August 19th, 19:00 hr



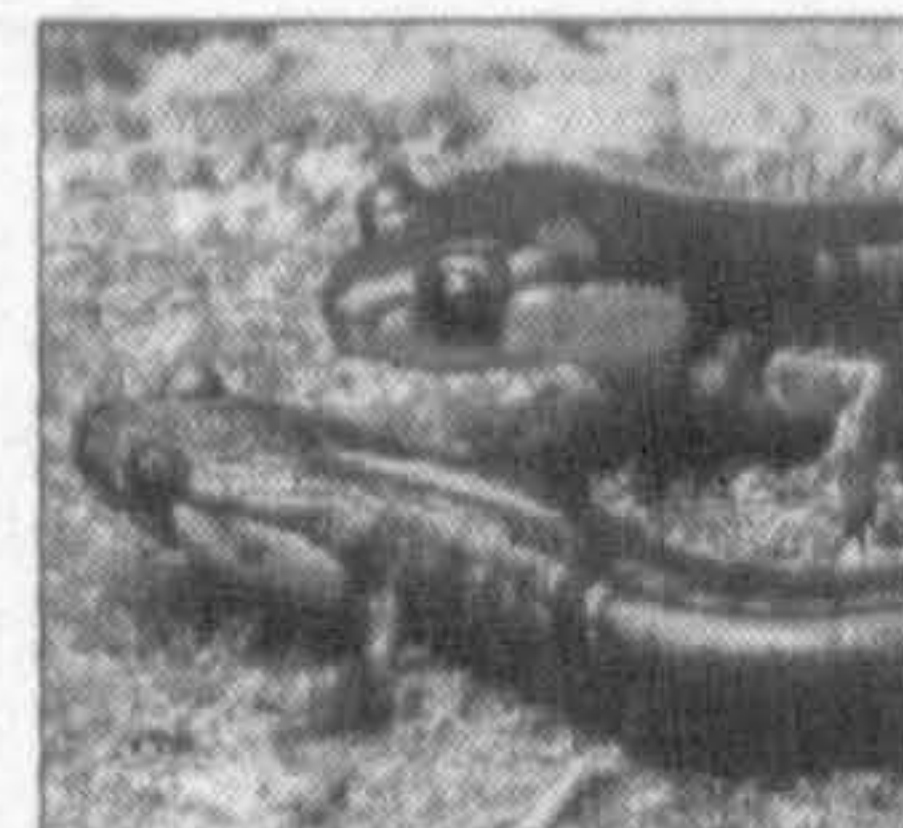
The 8th World Congress of Herpetology will project an outstanding audio-visual show featuring amphibians of the Appalachian Mountains of eastern North America. This program was originally produced by SSAR in 1979 and quickly became a popular event at the society's annual meetings over the years. It was also shown at the 1st World Congress of Herpetology, held in Canterbury, UK, in 1989, and was screened multiple times in response to popular demand. Because the old technology became dated, a completely new version using high-definition BluRay recordings has been created. This 25-minute program will be shown at this Congress on Friday afternoon, August 19th, 17:30 hr.

AMPHIBIANS OF THE APPALACHIANS features salamanders, frogs, and toads in their natural habitats. All of the photographs were taken in the field by two noted wildlife photographers, David M. Dennis and J. Eric Juterbock. It required about 25 separate trips to the Appalachians—at all seasons of the year and over a five-year period—to make the thousands of photographs necessary for this show. The images are arranged in an annual cycle from spring emergence

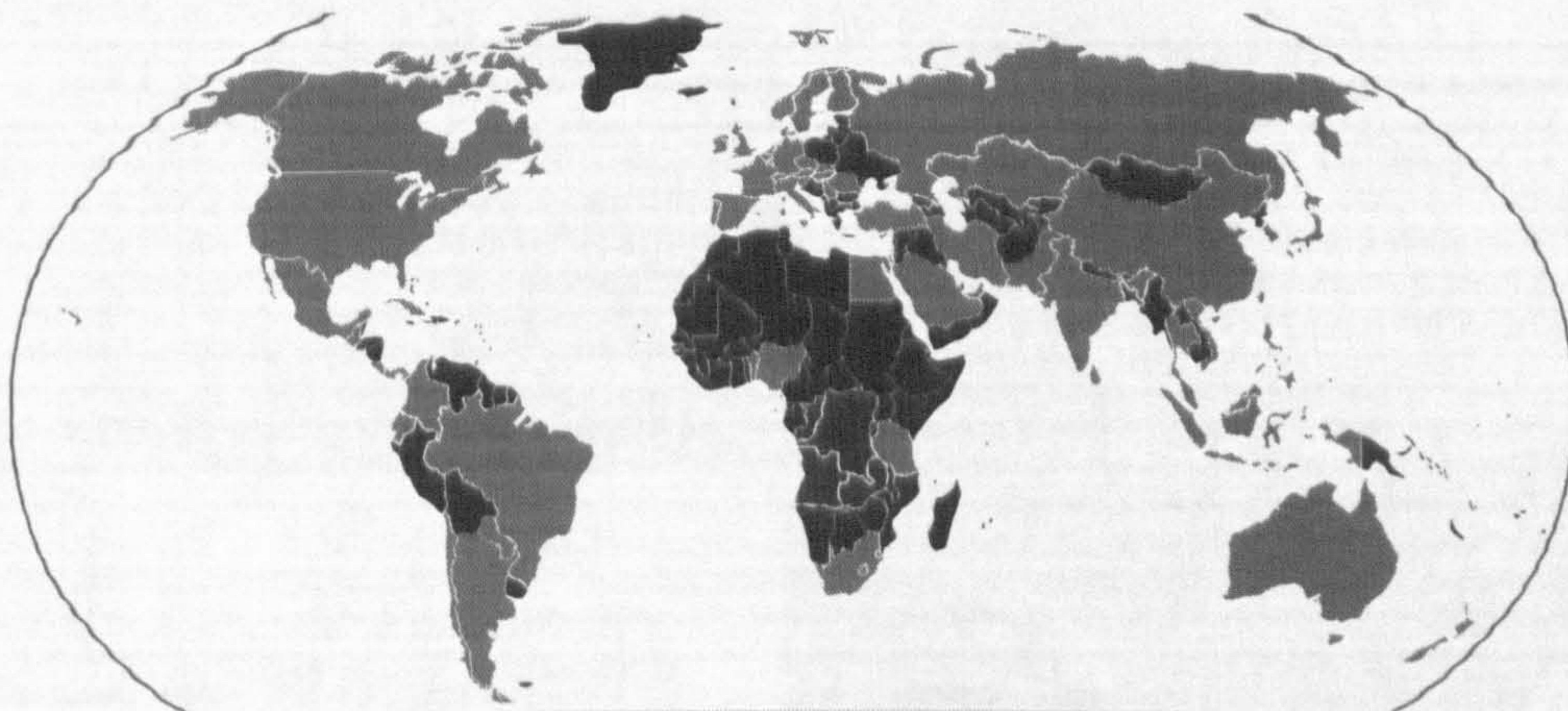
to winter hibernation. There are many spectacular photographs depicting courtship, predation, locomotion, and other behaviors, as well as breath-taking scenic views from throughout the seasons. These mountains are the ancestral home of the Family Plethodontidae, the largest family of salamanders, and many little-known and newly-described species are included in the program. All animals are identified to species and all scenes are named to location. This program will remind us all why herpetologists choose to spend our lives studying these highly interesting and most beautiful animals!



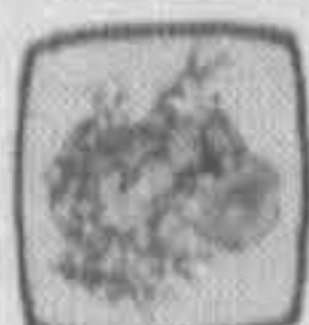
An American toad (*Anaxyrus americanus*) calling in May.



Mimicry between plethodontids (*Desmognathus* and *Plethodon*).



The members of SSAR represent more than 65 countries (see map).
We send greetings and best wishes to our Chinese colleagues
for a most successful 8th World Congress of Herpetology.



General Information

Registration/Information Desk

Registration and congress materials will be located in the lobby of the New Century Grand Hotel Hangzhou on Monday August 15 and then moved to the Organizer's office within the hotel on Tuesday August 16. The conference office hours are:

- Monday August 15: 8:00am–10:00pm
- Tuesday August 16: 8:00am–6:00pm
- Wednesday August 17: 8:00am–6:00pm
- Thursday August 18: 8:00am–6:00pm
- Friday August 19: 8:00am–6:00pm
- Saturday August 20: 8:00am–4:00pm
- Sunday August 21: 8:00am–10:00am



Full Registration Inclusions

- WCH8 delegate kit and name badge
- Online delegate handbook (access to the online conference program & abstract booklet)
- Admission to all Plenary, Oral and Poster sessions
- Coffee breaks on days of nominated attendance

Name Badge

Admission to all conference activities is by name badge, so please be sure to wear your badge at all times. Please help us recycle by returning your name badge holder to the Registration Desk upon conclusion of the Congress.

Coffee Breaks

Coffee breaks for conference attendees will be held daily at 10:00-10:15am and 3:30-3:45pm. There will be two coffee break stations within the New Century Grand Hotel Hangzhou, one on the 3rd floor and one on the 4th floor.

Meal Plan

For those delegates who have purchased a meal (lunch and/or dinner) plan in advance, daily lunch (Tuesday-Saturday) is served from 11:30am-1:30pm in the Mediterranean Cafeteria on the 1st floor of the New Century Grand Hotel Hangzhou, and daily dinner (Monday-Saturday) is served from 5:30-8:00pm in the same Cafeteria. Meal tickets are not available for purchase on site. For those who have not purchased a meal plan, there are numerous food outlets available in the vicinity of the hotel.

Internet Access

Wireless internet access is available in the New Century Grand Hotel Hangzhou by choosing the “ikaiyuan” network from your wireless options. The network does not need a password. Once you have selected “ikaiyuan”, go to any webpage on the internet that is allowed by the Chinese government.

Accommodation

- New Century Grand Hotel Hangzhou (Conference Venue) – 818 Middle Shixin Road, Xiaoshan District, Hangzhou, China
- Zhong'an Hotel (Holiday Inn Hangzhou Xiaoshan) – 688 Middle Shixin Road, Xiaoshan District, Hangzhou, China
- Baosheng Hotel – 618 Middle Shixin Road, Xiaoshan District, Hangzhou, China

All residence are open 24 hours a day, 7days a week. Check-in is from 10:00am and check-out is at 12:00am. Any person failing to check out at 12:00am should pay for a half (before 6:00pm) or whole (after 6:00pm) day. Your hotel has facilities to store your luggage. For more information, please contact the front desk of your hotel.

Conference WAP Website

WCH8 WAP Website will keep you organized during the meeting. You can view:

- An up-to-date daily program
- All abstracts
- Venue maps
- Plenary speakers

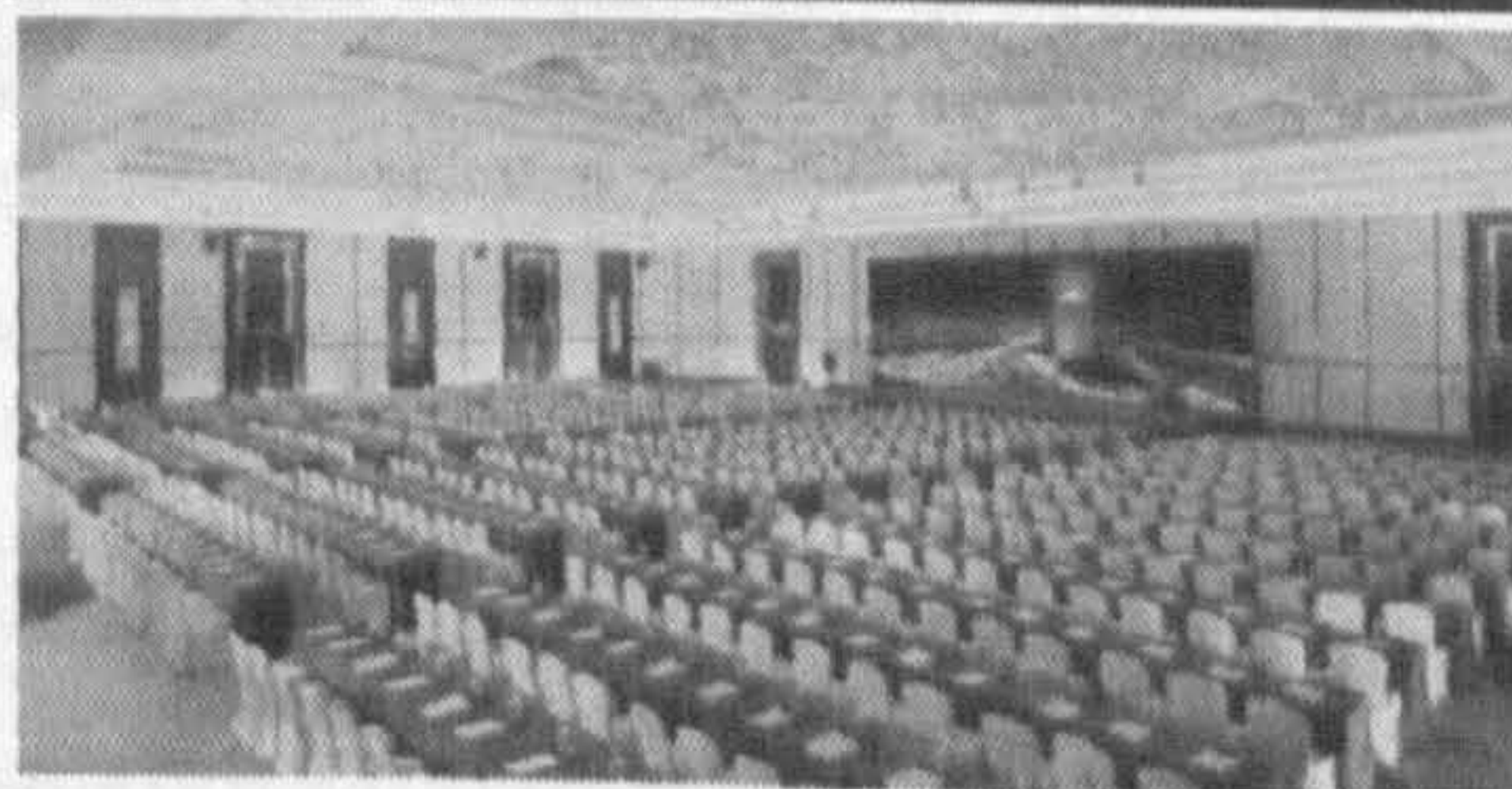


Copy <http://www.wch2016hangzhou.org>, or <http://www.alford.icoc.me>, to your browser, or use WeChat by scanning the QR code.

Please use registration email as username and last name as personal password to login WCH8 WAP website.

Session Locations

All plenary sessions will take place in Jingchao Hall on the 4th floor of the New Century Grand Hotel Hangzhou. Concurrent sessions will be held in Jingchao Hall, Mingde & Mingsi Room, Mingrui Room, Tianhong Room, Tianhe Room, Minghou Room and Gui Room on the 4th floor, and Mingdu 2 and Mingdu 6 & 7 Room on the 3rd floor.



Scientific Program

All presentation schedules are now available on the WCH8 website:

<http://www.wch2016hangzhou.com/bencandy.php?fid=38&aid=696>

Plenary Presentations

Morning plenary sessions will take place daily in Hall Jingchao_A on the 4th floor of the New Century Grand Hotel. The WCH8 Organizer does not guarantee your seat for late arrivals.

Oral Presentation Guidelines

- Please send your presentation materials to Dr. Yan-fu Qu (wch2016@vip.163.com) on or before August 8. Please identify your presentation in the following format: Date of Presentation_Time of Presentation_Session Number_Last Name_Abstract ID.
- All contributed presentations are allotted 15 minutes; symposium presentations

may have 25 (mini-plenary) or 15 minutes. The allotted time includes an announcement of the talk, the presentation and questions. Speakers should allow sufficient time for questions. All talks will start on time, and no speaker will be allowed to go over time.

- All rooms will be equipped laptop PC, screen or LED project, presenter remote, wireless lapel and podium microphones.
- The WCH8 currently operates with Microsoft Office Suite 2010 applications. It is the responsibility of the presenter to ensure that your presentation is compatible with the currently used operating system.
- Presenters should arrive at their allocated session no less than 15 minutes before the start of the first presentation in order to meet with the session chair and check in with the AV operator.
- Presentations must be presented in English, which is the official language of the WCH8.

Poster Presentation Guidelines

- The maximum poster size provided is 90 × 180 cm (W × H). All posters will be displayed in the corridor on the 4th floor of the New Century Grand Hotel. Each poster will have a unique ID on the poster board same as the ID of a submitted abstract.
- Please make sure that the title of your poster is the same as that of your abstract and that you include all the names of your contributed authors.
- Posters can be placed up in the evening of Tuesday August 16th and taken down in the evening of Thursday August 18. The official poster sessions will be from 7:30pm-9:30pm on Wednesday August 17. Poster presenters will be required to stand by their poster and answer any questions which delegates may have during this time.
- The WCH8 Organizer does not take any responsibility for posters left on display afterwards.

Banking and Foreign Exchange

Bank of China, Industrial and Commercial Bank of China, China Minsheng Bank, Guangdong Development Bank and HSBC Bank, located in the vicinity of the three hotels, provide banking and exchange facilities from 9:00am-5:00pm.

Taxis

Taxis are available in front of New Century Grand Hotel Hangzhou, Baosheng Hotel and Zhong'an (Holiday Inn). A taxi to the Hangzhou Xiaoshan International Airport is approximately \$15 (CNY 110), and to downtown (West Lake) is \$12 (CNY 80).

Public Transit

The Translink Bus Loop (Hangzhou Public Transport System) is located across the street from each hotel. The METRO station is just outside New Century Grand Hotel Hangzhou.

Childcare

The WCH8 does not offer Childcare service

Out of Country Insurance

Liability insurance is the responsibility of each individual delegate. Visitors are not covered by the Chinese Medical Health Insurance Plan. Delegates should have their own medical coverage.

Responsibility

The Organizing Committee assumes no responsibility for accident, losses, damage, delay, or any modifications to the program arising from unforeseen circumstances. It accepts no responsibility for travel or accommodation arrangement. The participant acknowledges that he or she has no right to lodge damage claims against the Organizing Committee should the conference proceedings be hindered or prevented by unexpected political or economic events or generally by acts of god, or should the non-appearance of speakers or other reasons necessitate program changes.

Parking

Limited parking is available only for delegates staying in the three hotels for a daily rate. Delegates staying off these hotels are requested to park in public parking places in the vicinity of your hotel.

Emergencies

Zhejiang Xiaoshan Hospital

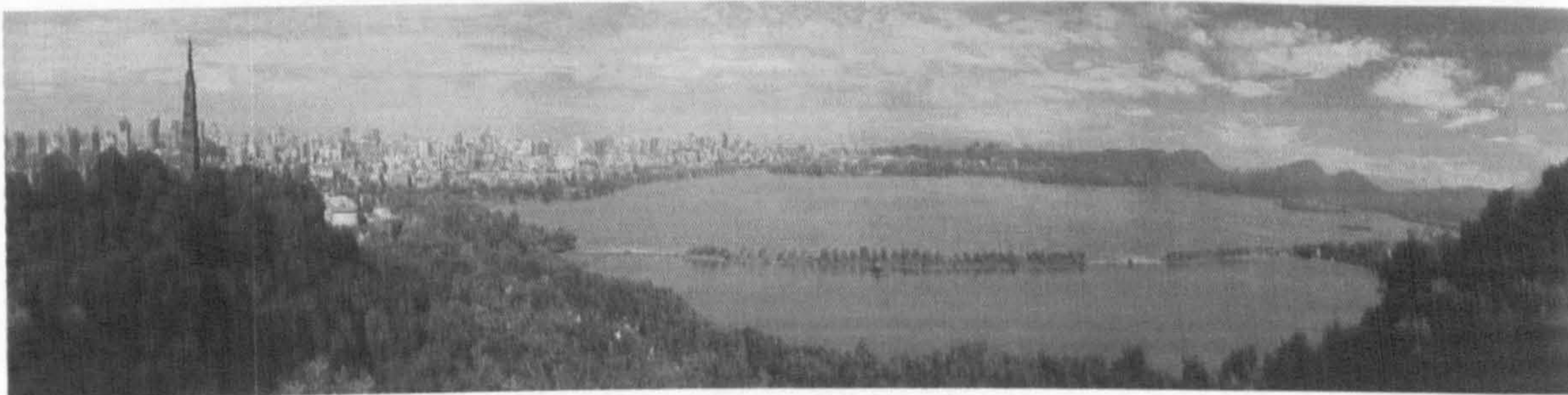
Open 24 hours a day, 7days a week

Phone: +86 571 83865858

Address: 728 North Yucai Road, Xiaoshan District, Hangzhou, China

Emergency Telephone Numbers

- Police: 110
- Fire: 119
- Ambulance: 120
- Business Complaint: 12315
- Mayor's Hotline: 12345



Current Zoology

EDITOR IN CHIEF

Anming
Meng

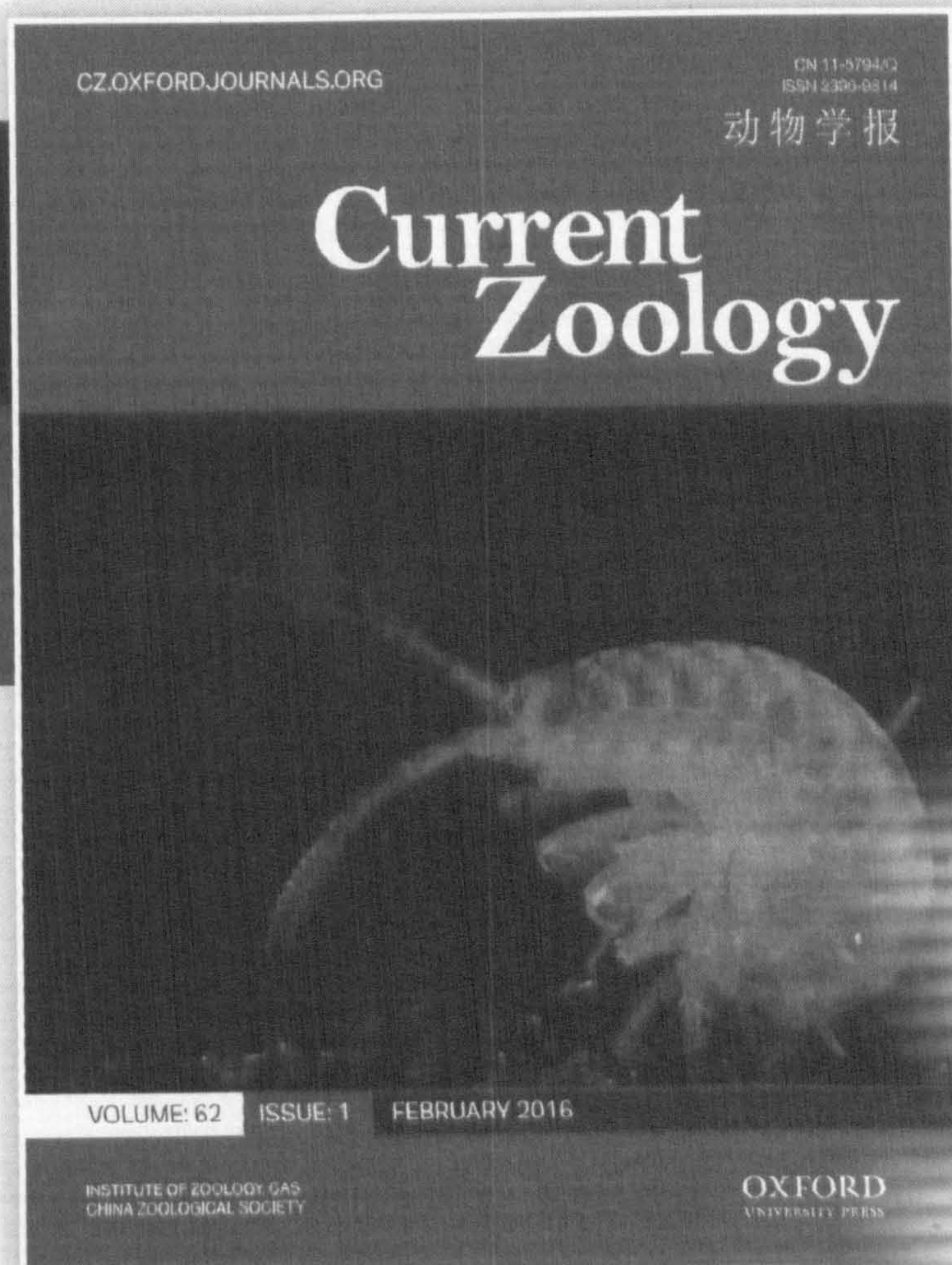
2015 IMPACT FACTOR

1.758

SI: ZOOLOGY

35 OUT
OF **160**

Current Zoology (formerly *Acta Zoologica Sinica*, founded in 1935) is a bimonthly, peer-reviewed international journal of zoology. It publishes papers in the fields of ecology, evolution and behaviour.



Visit <https://cz.oxfordjournals.org> for more information, instructions to authors, and to submit online today.

OXFORD
UNIVERSITY PRESS

W H Y P U B L I S H I N

Current Zoology?



- ★ **Fast first decision**
- ★ **Rapid publication**
- ★ **High quality title**, ranked in Q1 of the Zoology Category in the Journal Citation Reports
- ★ **No page charges**
- ★ **Fully open access**, all articles easily accessible
- ★ **No open access fees** during 2017
- ★ **Wide range of special columns/issues**, with Guest Editors
- ★ **High impact:** your research highly discoverable through the Oxford University Press website

QUESTIONS ABOUT SUBMITTING?

Please contact the editorial office at **zool@ioz.ac.cn**

<https://cz.oxfordjournals.org>

OXFORD
UNIVERSITY PRESS

Special Events

Cocktail Party

The Cocktail Party will be held in Kaiyuan Hall on the 4th floor of the New Century Grand Hotel Hangzhou from 7:00-8:30pm on Monday August 15. Tickets are required for all attendees and accompanying persons. Included are:

- Hot and cold appetizers
- Beverage
- Beer
- 2 wine tickets

WCH8 Silent Auction

The WCH8 Silent Auction will be held in Room Mingdu 2 of the New Century Grand Hotel Hangzhou from 7:30-10:00pm on Friday August 19. The WCH8 Organizer accepts any herp-related donations, including but not limited to, frameable art (photographs, paintings, and line illustrations), books, music, glassware, jewelry, clothing and gift certificates for Hangzhou area services/events during the meeting week. The auction cannot include any food items or items made from reptiles or amphibians. We request auction items are hand-carried by the donor to the conference. The donor is responsible for customs declaration. Details are found on the WCH8 Silent Auction Donor Form, fill it out and e-mail it to Dr. Yan-fu Qu (wch2016@vip.163.com). The auction solicitation deadline is August 10.

Bid Presentation and SSAR Show

The bid presentation for the 2020 World Congress of Herpetology will take place in Room Mingdu 2 the New Century Grand Hotel Hangzhou from 7:30-8:30pm on Friday August 19. Admission is for all people (including guests) who have a valid name badge. All bid presentations are allotted 10 minutes, and the allotted time is only for presentation. Before the bid presentation, there is a SSAR Show (Amphibians of the Appalachians). Representatives from the following four countries (cities) are invited to present their bid presentations:

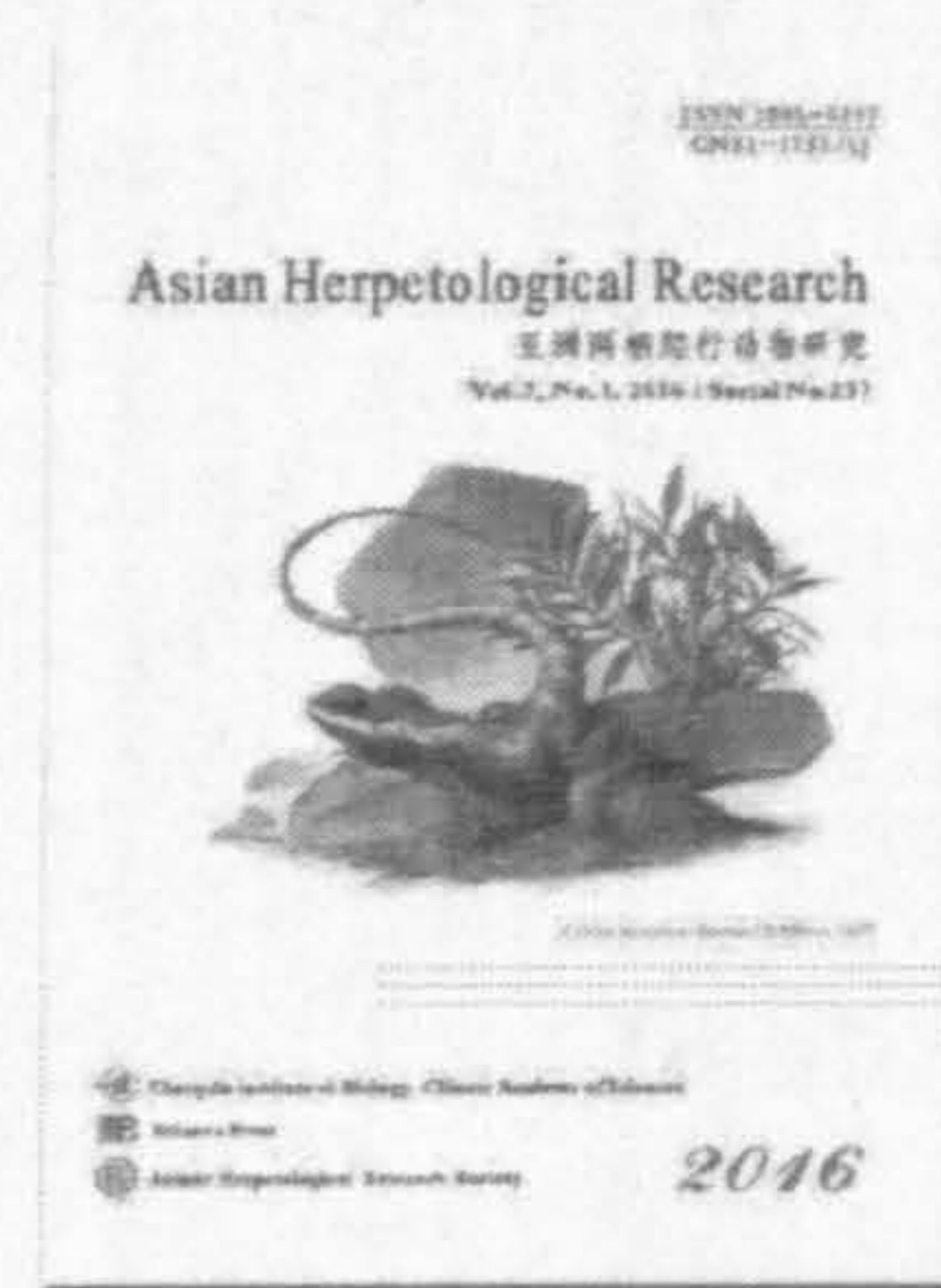
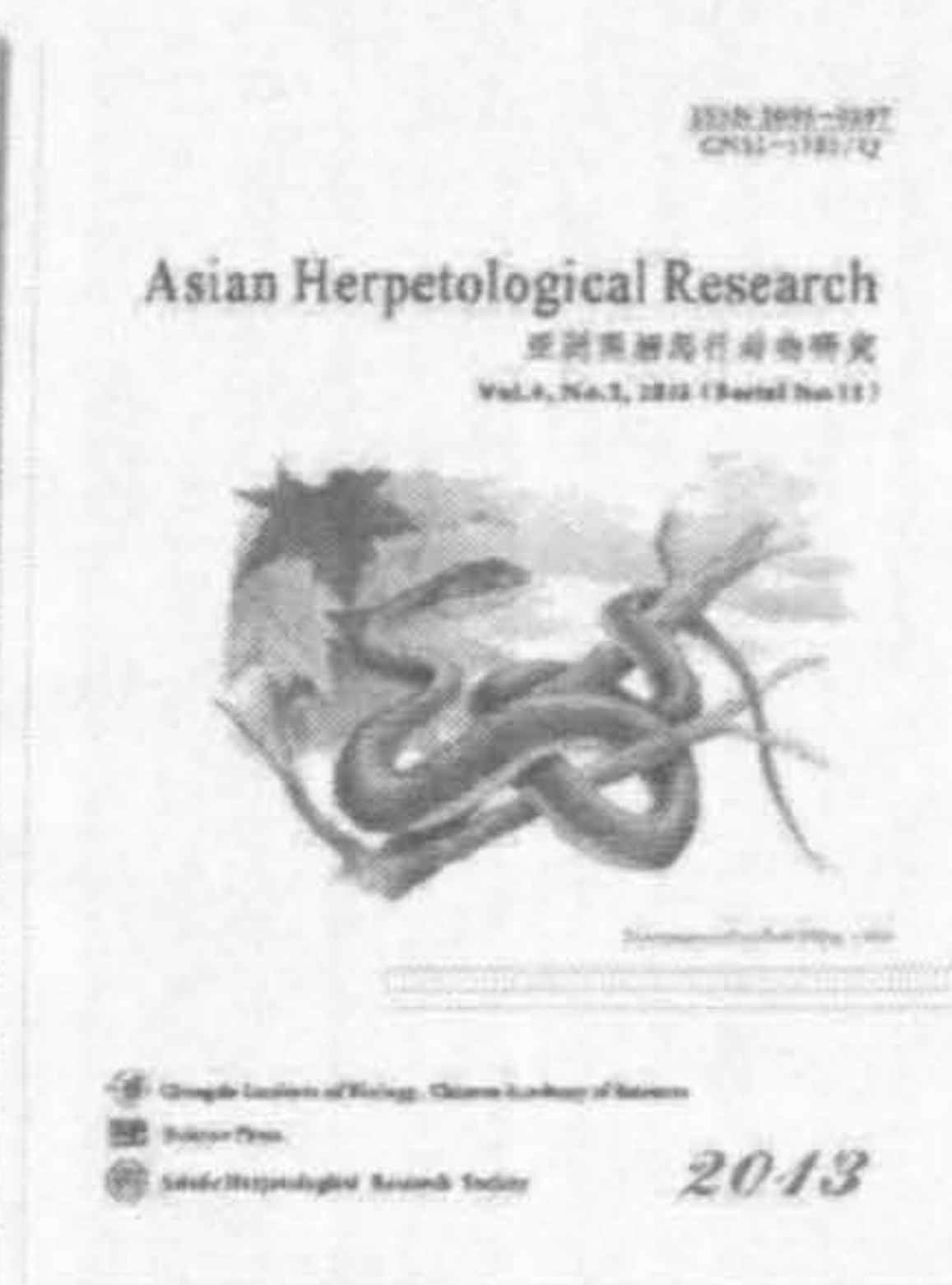
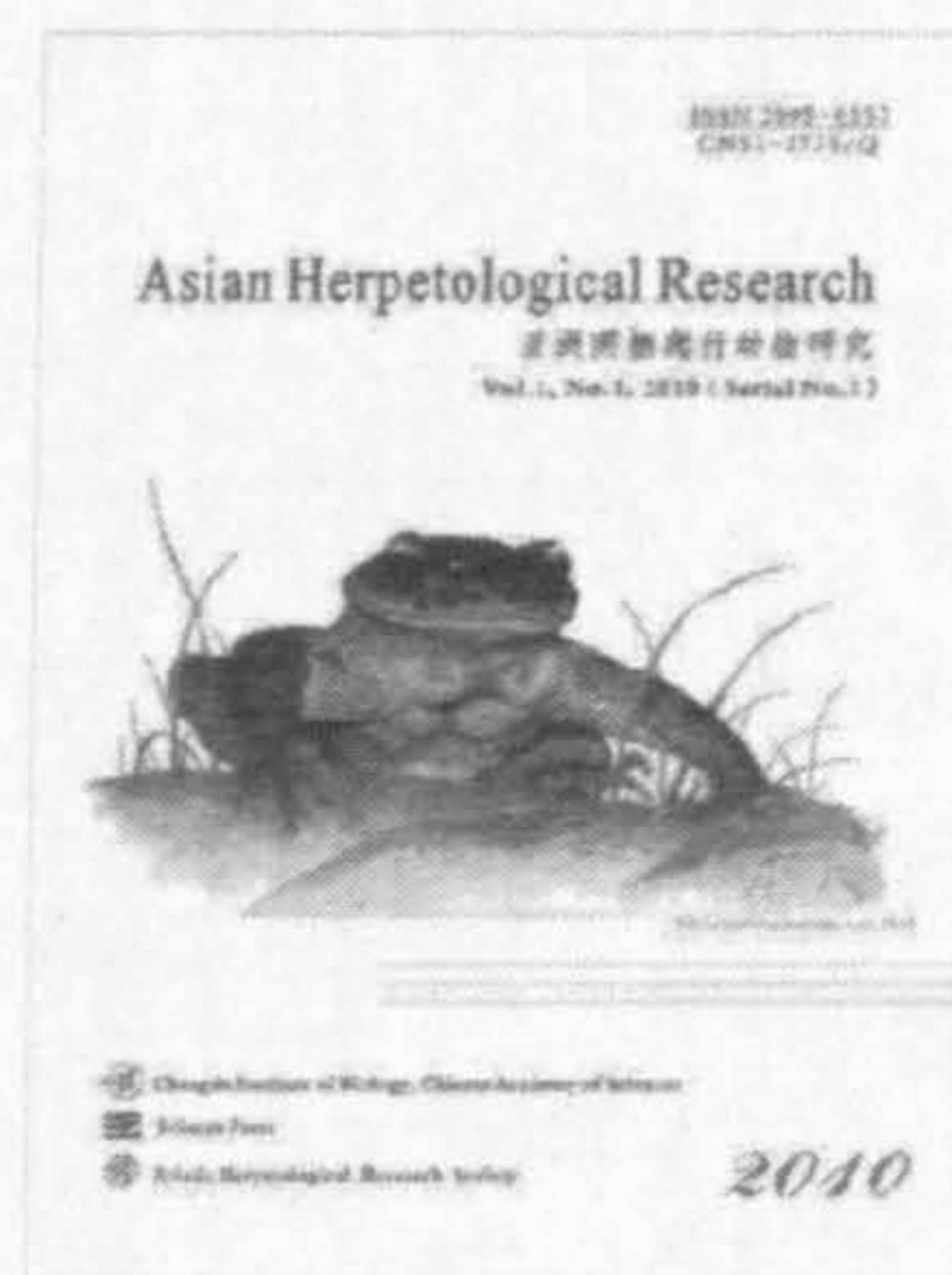
- Australia (Gold Coast)
- Hungary (Budapest)
- Kenya (Nairobi)
- New Zealand (Dunedin)

Closing Banquet

The Closing Banquet will take place in Kaiyuan Hall from 6:30-8:30pm on Saturday August 20. National dance performance will be the dinner entertainment. Tickets are required for all attendees and accompanying persons. Included with the purchase of your ticket are:

- Table dinner of typical Chinese food (Vegetarian option also available)
- Dessert
- Beverage
- Beer
- Traditional liquor

Asian Herpetological Research (AHR)



Why publish in Asian Herpetological Research?



Professional Editorial Team



Fast Decision



Quick Publishing



Open Access



SCI Journal



International Influence

Asian Herpetological Research

Overview: Asian Herpetological Research (AHR), an international English language journal, is published quarterly by the Chengdu Institute of Biology, Chinese Academy of Sciences (CIB), and the Science Press of China, cooperated with the Asiatic Herpetological Research Society (AHRs), with its registered numbers: CN 51-1735/Q and ISSN 2095-0357.

Scope: The scope of the journal includes all contemporary herpetological research areas including taxonomy, fauna, morphology, phylogeny, systematics, evolution, zoogeography, physiology, ecology, toxicology and conservation biology of amphibians and reptiles. AHR welcomes submission of manuscripts from authors in all countries of the world, though with a focus on the herpetological studies in the Asian and Pacific Region, including research articles, short communications and review articles.

Aims: The principal criteria of AHR for acceptance of articles for publication are the quality and significance of the research, breadth of interest of the work to the readership, and the clarity and effectiveness of communication.

Submission: To submit your manuscript to AHR, please use the Scholar One Online Manuscript Submission System at <https://mc03.manuscriptcentral.com/ahr>.

Contact us: Chengdu Institute of Biology, Chinese Academy of Sciences, No. 9, Sect. 4, South Renmin St., Chengdu 610041, Sichuan, China ahr@cib.ac.cn



CIB



Science Press



AHRs

Plenary Speakers

Barry Sinervo, Tuesday 16 August 10:00-10:45

The Sixth Mass Extinction is Underway: The Current Reptile and Amphibian Biodiversity Crisis Compared to Extinctions over the Past 200 Million Years



Barry Sinervo is an evolutionary biologist conducting research on Behavioral Ecology, Game Theory and the Biotic Impacts of Climate Change. Early in his career he discovered the first biological example of the rock-paper-scissors game, played out in nature by the side-blotched lizard. He is co-author with Dan Friedman of a book (2016) entitled: "Evolutionary Games in Natural, Social and Virtual Worlds". He is currently researching contemporary extinctions of reptiles and amphibians and changes in plant communities driven by climate change, at sites distributed on five continents, leading a multinational research team of scientists developing physiological models of the biotic impacts of climate change on diverse biological systems, and measuring the biotic impacts of climate from

equatorial sites to polar regions. He also runs an REU sites program at UC Santa Cruz each summer, and gives workshops on climate change science at institutions around the world. He is also Director of the UC-wide Institute for the Study of the Ecological and Evolutionary Climate Impacts, a research consortium funded by a UC Presidential Research Catalyst Award, studying biotic impacts of climate change across the UC Natural Reserve System of California.

Kate Sanders, Tuesday 16 August 10:45-11:30

Rapid Radiation and Speciation of Sea Snakes



Kate Sanders is a Senior Lecturer at the University of Adelaide, Australia. Her current projects involve: 1) phylogenetic and population genomic approaches to understanding the biogeographic origins of sea snake diversity in the Indo-Australian marine biodiversity hotspot; 2) reconstructing morphological evolution in sea snakes, especially the remarkably frequent origin of 'microcephalic' burrowing-prey specialists and possible role in promoting reproductive isolation and rapid species diversification; 3) the evolution of sensory systems in the transition to aquatic habitats in snakes, including transcriptomic studies of tail (skin) photoreception and vomeronasal gene family evolution. Kate's research has a substantial fieldwork component focused primarily in Indonesia and Western Australia. This has led to the discovery of new species, and

generated ecological and distributional data that have contributed to conservation assessments. She co-chairs the IUCN/SSC Sea Snake Specialist Group.

Yi-ming Li, Tuesday 16 August 11:30-12:15

Dynamics of Species Range: Roles of Climate, Topography and Human Activities

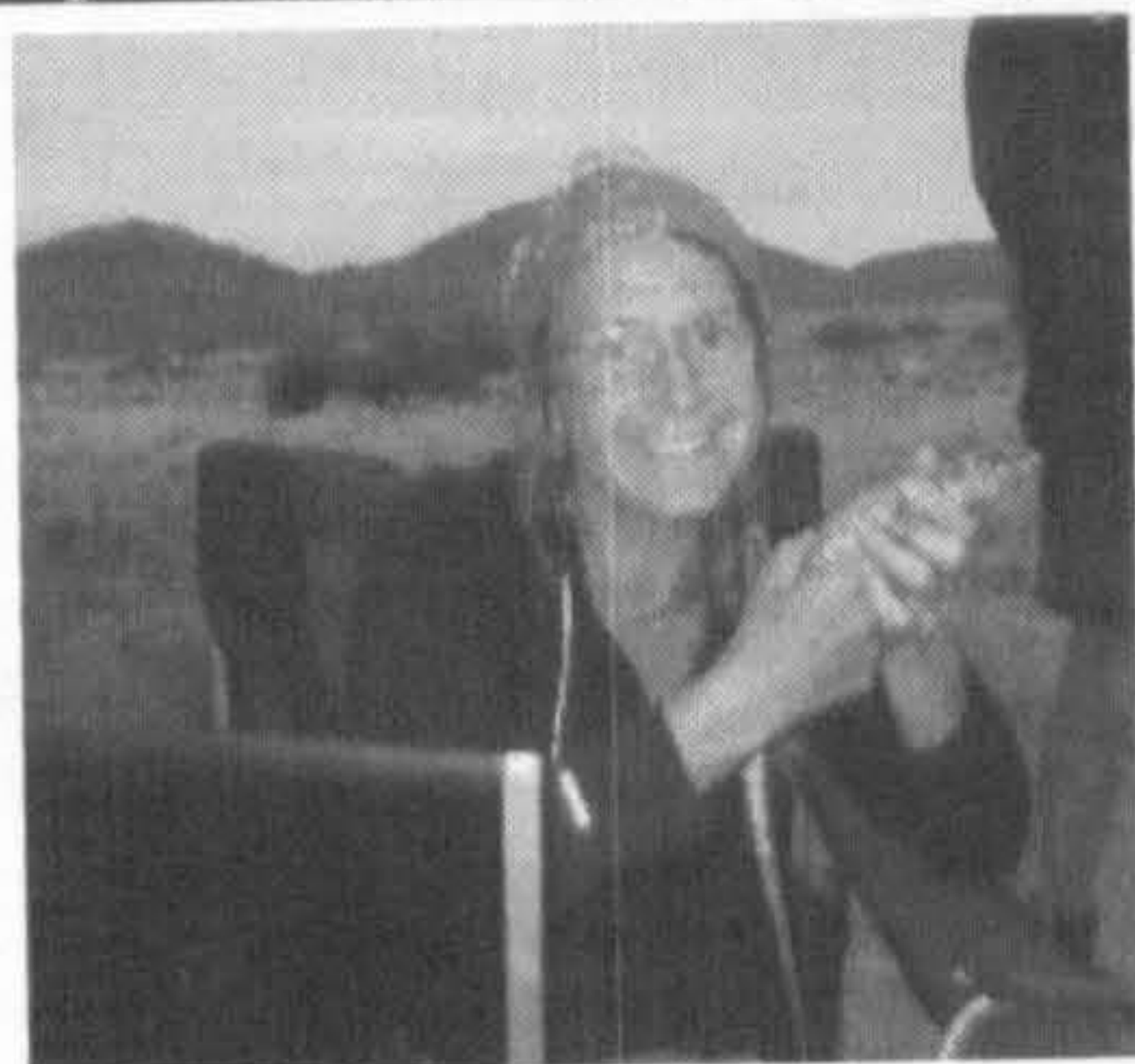


Yiming Li is Head of the Diversity and Spatial Ecology Research Group, Institute of Zoology, CAS. He is interested in ecology and conservation biology of amphibians and reptiles, and macroecology of terrestrial vertebrates, particularly in causes for population declines of amphibians, alien herpetofauna invasions, effects of long-term habitat fragmentation and climate change on the population declines, and shifts in range and life-history traits of amphibians. His group has worked with a diversity of taxa, driven by interesting and general questions across different taxa from local to global scale. His field work covers northern, eastern and western

China, mainly focusing on island biogeography of amphibians in coastal islands and nearby mainland, macroecological pattern of amphibians and reptiles, invasion biology of invasive American bullfrog, and distribution, spread, phylogenetic and impacts of chytrid fungus infecting amphibians in China. He has published more than 90 scientific papers or book chapters. He is a member of the National Endangered Species Scientific Commission, vice president of Chinese Herpetological Society, and an Associate Editor of *Current Zoology*.

Krystal Tolley, Wednesday 17 August 8:30-9:15

Ever Since Gondwana: The Influence of Changing Climate, Fragmenting Forest, and Spreading Savanna on the Biogeography of African Reptiles



Krystal Tolley has been working in the field of African herpetology for 15 years, and has written two books on African chameleons, and numerous peer-reviewed publications. She specialises in phylogenetics, phylogeography and biogeographic studies of African reptiles and amphibians, particularly chameleons. With her co-authors, she has described or elevated many genera and species of chameleons, lizards and frogs. She has participated in and/or led field surveys in South Africa, Namibia, Angola, Mozambique, Malawi and Kenya. She currently serves as the Red List Focal Point for the IUCN Chameleon Specialist Group, and drives the Red listing initiatives, which has

ensured that every species of chameleon has been assessed for IUCN. She also leads the IUCN Southern African Regional Reptile Specialist Group. She heads the Molecular Ecology group at the South African National Biodiversity Institute in Cape Town, where she currently supervises postgraduate students, interns, and junior staff. She has led a number of successful research projects involving students and interns plus local and international collaborators. In 2015, she joined the Editorial Board of Journal of Biogeography.

Indraneil Das, Wednesday 17 August 9:15-10:00

Ethnoherpetology: Perspectives and Conservation



Indraneil Das works with the Institute of Biodiversity and Environmental Conservation, based at Universiti Malaysia Sarawak. Located in the heart of the SE Asian tropics, his research group works on a variety of topics, from herpetological systematics, to community ecology, and conservation biology, to the history of natural history. We use state-of-the-art technologies for field studies, including automated weather stations, acoustic recorder stations, remote sensing, drones for aerial surveys, underwater sonar for subaerial biodiversity, radiotelemetry and other tracking devices. These (and other) activities of the group are supported by Fundamental Research Grants from the Ministry of Higher Education, Government of Malaysia, Shell Chair, Conservation International, United Nations Development Programme / Global Environmental Facility, The

Mohamed bin Zayed Species Conservation Fund, Volkswagen Stiftung and the National Geographic Society.

Paula Cabral Eterovick, Friday 19 August 8:30-9:15

A Challenging World for Frogs



Paula Cabral Eterovick is interested in the distribution of frogs and the interactions between tadpoles and their predators. She has studied frogs for over 10 years focusing on varied subjects from natural history to population genetics, which has resulted in over 50 peer-reviewed publications. She is very familiar with mountaintop ecosystems of the southern Espinhaço Mountain Range in southeastern Brazil, a biodiversity hotspot that represents a transition between the Atlantic Forest and the Cerrado. She authored a widely used field guide for the amphibians of the Serra do Cipó, a region of the Espinhaço, and

described a new species from there. She is an Associate Professor at Pontificia Universidade Católica de Minas Gerais where she teaches courses in ecology, zoology, and genetics to graduate and undergraduate biology students and environmental science to engineering students. She participated in national and international conservation workshops that produced lists of threatened species, maps of priority areas for conservation, and future directions for the study of tadpoles. She has collaborated with researchers from Australia and the United States and has lead several funded projects involving students from different levels, most recently on using environmental DNA as a tool to understanding the distribution of frogs.

Hidetoshi Ota, Friday 19 August 9:15-10:00

Systematics and Biogeography of the East Asian Herpetofauna, with Emphasis on the Recent Contributions from the Molecular, Cytogenetic, and Fossil Studies



Hidetoshi Ota is Director/Professor, Institute of Natural and Environmental Sciences, University of Hyogo, and Vice-Director, Museum of Nature and Human Activities. Since he first got at the inventory project for the herpetofauna of the Ryukyu Archipelago in 1981, he has been working on the current status, historical bearings, and conservation of diversity in reptiles and amphibians of the tropical, subtropical, and temperate East Asia, insular regions in particular. To the present, results have been published as over 250 peer-reviewed journal articles and book chapters. On the coming opportunity, he would like to review research results of his colleagues and himself, with special

reference to contributions of molecular, cytogenetic, and fossil data.

Corinne Richards-Zawacki, Saturday 20 August 8:30-9:15

Selection and the Evolution of Warning Color Diversity in the Strawberry Poison Frog



Corinne Richards-Zawacki is an Associate Professor at the University of Pittsburgh and the Director of the Pymatuning Laboratory of Ecology. Her research lies at the intersection of ecology and evolutionary biology in that she approaches questions about how changes in climate and habitat shape organisms and communities in a way that considers their evolutionary implications. Her work often integrates studies of molecular, morphological, ecological, and behavioral variation. She focuses mainly on amphibians because their diversity provides an exciting backdrop for exploring the interplay between ecology and evolution across a wide range of spatial and temporal scales. The questions she asks address: (1) how climate and host/pathogen evolution shape the dynamics of wildlife

diseases (2) the effects of changes in climate on species distributions and diversity (3) how reproductive isolation evolves during speciation and (4) the natural history and conservation of endangered amphibians. Current projects in my lab are focused on the roles of natural and sexual selection in the evolution of color variation in the strawberry poison frog (*Oophaga pumilio*), the role of climate and climate change in shaping the risk that chytridiomycosis poses to North American amphibians, and how Panamanian amphibians are managing to survive and, in some cases, perhaps even begin to recover a decade after a chytridiomycosis epizootic.

Francesco Ficetola, Saturday 20 August 9:15-10:00

What Determines Biogeographical Patterns of Amphibians and Reptiles: The Past, the Present and the Humans



Francesco Ficetola is a research scientist at the Alpine Ecology lab in France. He tries to combine these two approaches to better understand how environmental systems change, which factors determine their modifications, and which are the consequences across multiple spatial and temporal scales. His current research activities include: 1) Studying the factors that determine the biodiversity of amphibians and reptiles at broad spatial scale; 2) Evaluating how evolutionary processes can be integrated into macroecological analyses; 3) Improving our understanding of biological invasions of amphibians and reptiles, and of their impact on native species; 4) Identifying strategies for amphibian conservation at the local, landscape and national scales. 5) Using eDNA for the study of impact of human activities on present and past biodiversity. He would like to integrate the eDNA-analysis of

ecosystems, which provide lot of information over fine spatial scales, with the macroecological approach, in order to obtain results that are more general and that can be applied over broader areas. Despite most of my research activities have been performed in Europe, he is increasingly interested in the study of tropical and sub-tropical ecosystems in Asia and South America.

Mini-plenary Speakers

Judit Vörös, Tuesday 16 August 15:35-16:00

Pannonian Plain Served as Northerly Refugia for Amphibians in Central Europe



Judit Vörös's research is focusing on molecular systematics, conservation genetics and phylogeography of amphibians and reptiles. Her current projects from Central Europe involve (1) reconstructing recent evolutionary history of newt and salamander species within the Pannonian Basin and (2) conservation genetics of the endangered amphibian species *Proteus anguinus* in Croatia using microsatellites and eDNA. Earlier she was involved in molecular systematic and phylogeography research of *Litoria* frog

species in New Zealand and Australia. Her work on the integrative taxonomy of *Phyllodytes* species in the Atlantic Rainforest resulted in the description of a new species.

Wei-guo Du, Wednesday 17 August 13:50-14:15

How do Reptile Embryos Cope with Unpredictable Variation in Nest Temperatures?



Wei-guo Du's research group found behavioral thermoregulation in embryonic reptiles. He also conducts both laboratory and field experiments to determine the ecological consequences of developmental plasticity in reptile embryos. This kind of studies demonstrate that developmental plasticity significantly affects offspring phenotype and therefore fitness in reptiles. His work aims to explain the response of reptiles to temperature change from the organismal level to molecular level, and thereby provide implications for how reptiles respond to climate change.

Natalia B. Ananjeva, Friday 19 August 13:35-14:00

Distribution Modeling and Environmental Suitability of Asian Rock agamas of Paralaudakia Genus



Natalia B. Ananjeva worked on the ecology of arid lizards of Central Asia as her Ph.D. project, for many years she focus on taxonomy, phylogeny, speciation, morphology, ecology and conservation of Asian amphibians and reptiles, Central and Southeast Asia in particular; she had more than 50 field seasons in different regions of Asia. To the present, results have been published as over 280 peer-reviewed journal articles, 8 monographs and a number of book chapters. She was elected as Nikolsky's Herpetological Society President in 2006-2012 and Societas Europaea Herpetologica President in 2001-2009, honorary member of American Society of Ichthyologists and Herpetologists. She actively participates in national and international conservation workshops that produced lists of threatened species. She has

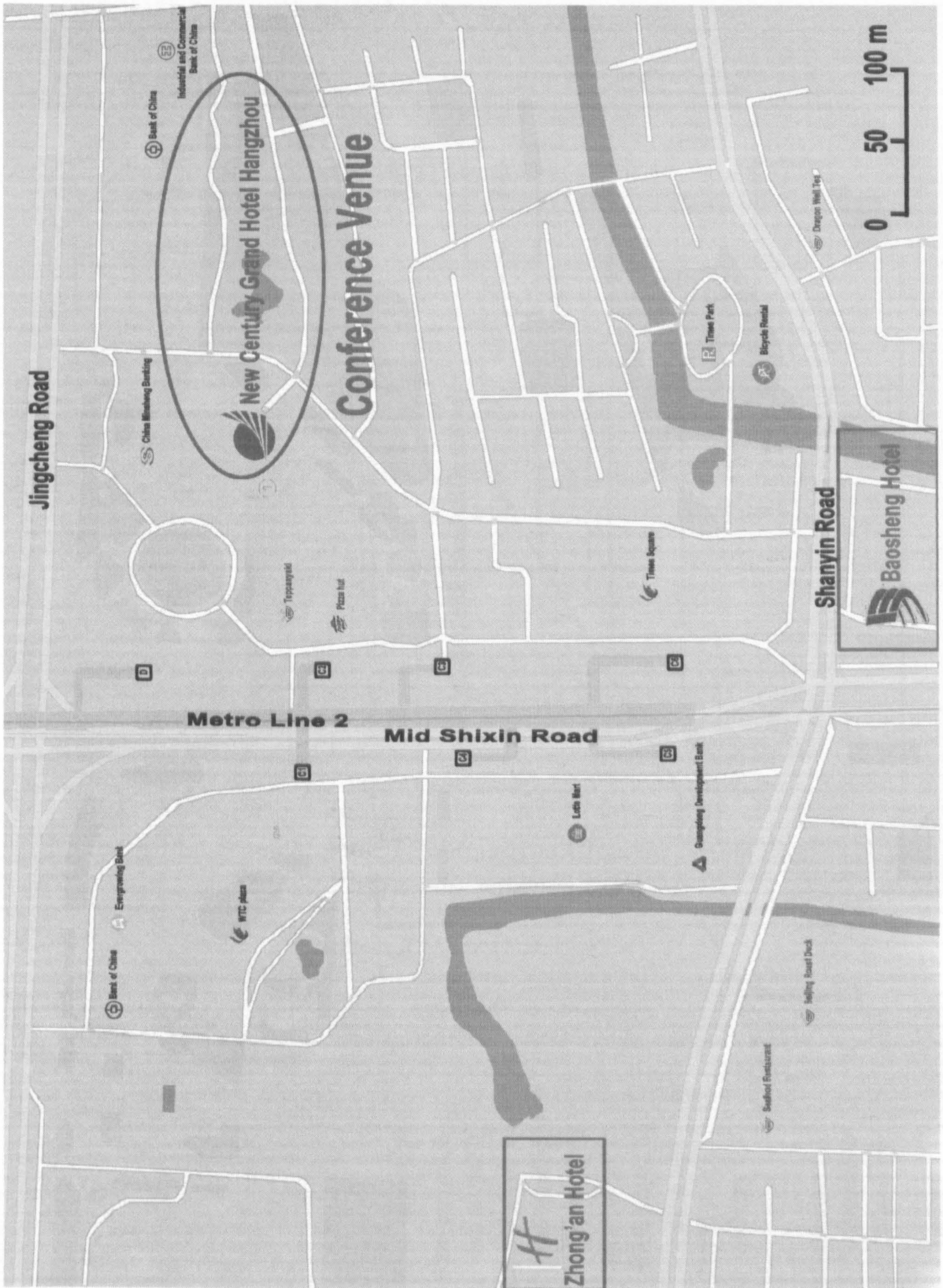
collaborated with researchers from China, Vietnam, Kazakhstan, Germany, France, the United States, Australia and Canada and has leaded several funded projects.

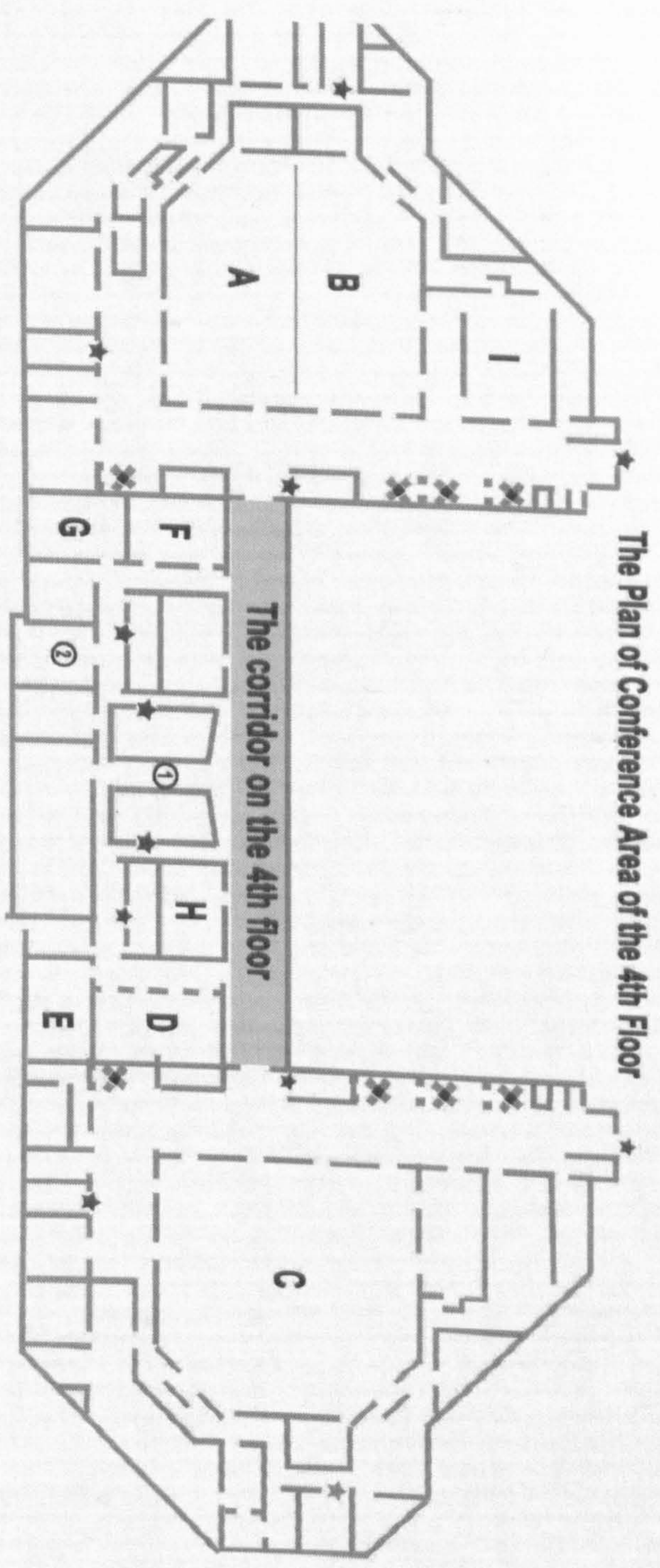
Ben Phillips, Friday 19 August 13:35-14:00

Using Local Adaptation to Mitigate the Impact of Climate Change

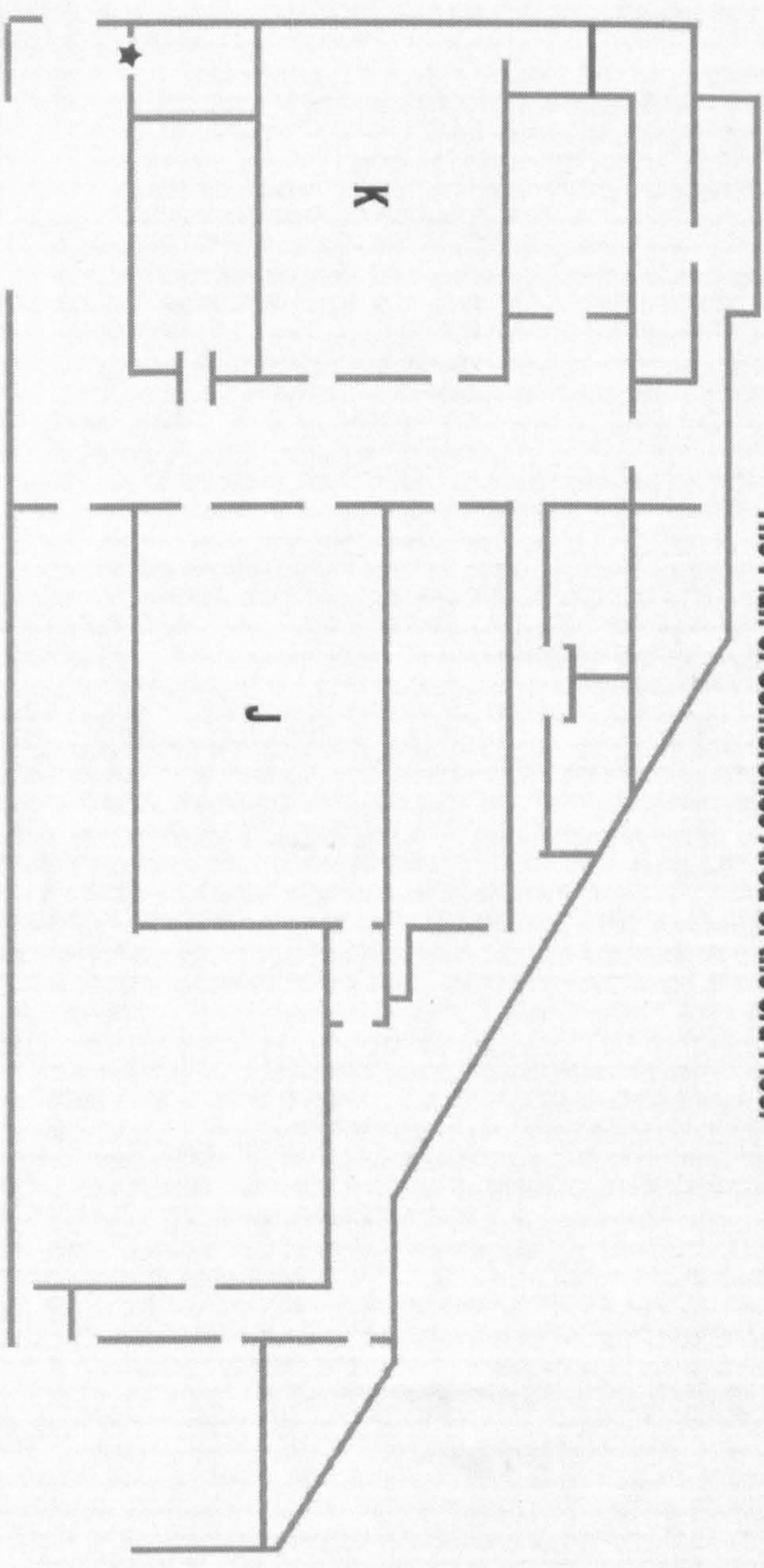


Ben Phillips is deeply interested in evolution and how spatial processes influence evolution. His current work is roughly organized as such: 1. Evolution on range edges. Using theoretical and empirical approaches to understanding how dispersal and life-history evolve on species' range edges. 2. Adaptation to climate in isolated populations. The idea here is to understand the role of isolation in generating adaptive diversity in the traits that mediate the impact of climate change. 3. Evolution in response to invaders. Most of this work is around evolution of Australian predators to the arrival of toxic cane toads. 4. Eco-evolutionary miscellania. The grab-bag that holds many other projects including work on invasive geckos and their parasites; the host-parasite dynamics of chytrid fungus and frogs; halting the spread of toads across northern Australia, to name a few. I'm always interested in making inference from ecological data.





The Plan of Conference Area of the 4th Floor



- A Jingchao Hall A
- B Jingchao Hall B
- C Kaiyuan Hall
- D Mingde & Mingsi Room
- E Mingrui Room
- F Tianhong Room
- G Tianhe Room
- H Minghou Room
- I Gui Room
- J Mingdu Room 2
- K Mingdu Room 6 & 7

- ★ Security Channel
- ① Elevator
- ② Elevator

Special Sessions at WCH8

Turtle Industry in China: Its Development, Current Status and Contribution to Turtle Conservation

Wednesday, 17 August 8:30-9:30am

Gui Room, the 4th floor of the New Century Grand Hotel Hangzhou

This is a Press Conference for people who are interested in production, utilization, conservation of turtles in China. Topics include: (1) the development status of turtle industry in China; (2) the contribution of turtle industry to turtle conservation; (3) the future direction of turtle industry in China.; and (4) the importance of WCH8 in promoting turtle conservation in China. The Press Conference is organized by delegates from Chinese Association of Turtles Industry and turtle-farming enterprises across mainland China.

Wildlife Acoustics Song Meter SM4 Hands-On Workshop

Wednesday, 17 August 10:15-12:15am

Gui Room, the 4th floor of the New Century Grand Hotel Hangzhou

In this hands-on workshop organized by Nicole Wright, participants will learn about the features of the new Wildlife Acoustics Song Meter SM4 bioacoustics recorder as well as how to program and record with the device. There will also be an overview of the useful configurator software. Attendees will be entered to win a FREE SM4. Please RSVP at sales2016@wildlifeacoustics.com

Conservation and Monitoring of Caudata: Using the Actual Data on *Hynobius amjiensis*

Thursday, 18 August 8:30-10:40am

Minghou Room, the 4th floor of the New Century Grand Hotel Hangzhou

This workshop is for people who are interested in conservation and monitoring of Caudata. The goal of the workshop is to exchange ideas on conservation biology, government policy, monitoring methods, and molecular biotechnology. Panelists include WCH8 delegates from Belgium (Frank Pasmans), China (Cang-song Chen, Jian-ping Jiang, Hung-du Lin, Jiao Mo, Feng Ren, Jie Wang, and Li-peng Yu), New Zealand (Phil Bishop) and United Kingdom (Helen Meredith)

MONDAY 15TH AUGUST – PROGRAM AT A GLANCE

	FOYER AT NEW CENTURY GRAND HOTEL	CAFE MEDITERRANEAN	CAFE MEDITERRANEAN	KAIYUAN HALL
10:00 AM	Registration Opens			
12:30 PM	Lunch			
18:00 PM	Dinner			
19:30 PM	Welcome cocktail party			

TUESDAY 16TH AUGUST – PROGRAM AT A GLANCE

	JINGCHAO HALL	MINGDU ROOM 2	MINGRUI ROOM	MINGDE & MINGSI ROOM	MINGDU ROOM 6 & 7	TIANHONG ROOM
08:30 AM	Opening ceremony					
10:00 AM	Plenary One The Sixth Mass Extinction is Underway: The Current Reptile and Amphibian Biodiversity Crisis Compared to Extinctions over the Past 200 Million Years Barry Sinervo					
10:45 AM	Plenary Two Radiation and Speciation of Sea Snakes Kate Sanders					
11:30 AM	Plenary Three Dynamics of Species Range: Roles of Climate, Topography and Human Activities Yi-ming Li					
12:15 PM	Lunch in Cafe Mediterranean					
13:30 PM		Symposium 2	Symposium 24	Symposium 20/ Symposium 21	Taxonomy Systematics Phylogenetics	Diversity Distribution
15:30 PM	Coffee Break					
15:45 PM		Symposium 30	Symposium 23	Symposium 21	Ecology Ethology	Genetics Development Morphology Biogeography
17:00 PM	WCH Exec/IHC meetings in Minghou Room					
18:00 PM	Dinner in Cafe Mediterranean					
19:30 PM	Chinese traditional art performance show You will be picked up by a bus at 17:45 PM from the front square of New Century Grand Hotel, and you will be returned back to the same hotel around 22:00 PM.					

TUESDAY 16TH AUGUST – OPENING CEREMONY IN DETAILS

JINGCHAO HALL

OPENING CEREMONY

Chair Xiang Ji

08:30 AM	Introduction of Guests
08:40 AM	Academician <u>Ya-ping Zhang</u> Congress Chairperson's Welcome Address
08:50 AM	President of Nanjing Normal University <u>Jian-dong Miao</u> Welcome Address
09:00 AM	President of Hangzhou Normal University <u>Wei Du</u> Welcome Address
09:10 AM	President of Lishui University <u>Gang Xiao</u> Welcome Address
09:20 AM	Jean-Mark Hero Welcome Address
09:30 AM	Awarding Ceremony Public speech of Award winners
09:45 AM	Group photo inside the Jingchao Hall

PLENARY LECTURE

Chair Jean-Marc Hero

10:00 AM	<i>Plenary One</i> <u>Barry Sinervo</u>
10:45 AM	<i>Plenary Two</i> <u>Kate Sanders</u>
11:30 AM	<i>Plenary Three</i> <u>Yi-ming Li</u>

TUESDAY 16TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 2

S2: How Lizards Turn into Snakes: Combining Fossils, Phylogeny, Function, Genetics, Development, Morphology, and Ecology

Organizers Agustín Guerrero Camacho & John J. Wiens

- 13:30 PM** Michael Caldwell
The fossil record of snakes: the first 100 million years ID130
- 13:45 PM** Randall Nydam
The problematic taxon “*Coniophis*” and its place in the fossil record of snakes ID125
- 14:00 PM** Anthony Herrel
Convergence in morphology and function in burrowing limbless squamates ID096
- 14:15 PM** Aaron M. Bauer
Pygopodid geckos and acontine skinks: alternative morphologies and evolutionary patterns in two ancient clades of limb-reduced lizards ID332
- 14:30 PM** Juliana G. Roscito
Uncovering the genomic signatures of snake-like body form evolution ID519
- 14:45 PM** Tiana Kohlsdorf
What EvoDevo can tell about the multiple origins of snakelike morphologies among squamates? ID541
- 15:00 PM** John J. Wiens
Macroevolutionary patterns in the evolution of snake-like reptiles ID462
- 15:15 PM** Agustín G. Camacho
Integrating patterns at the individual, population and species level during the evolution of snake-like lizards ID508

MINGRUI ROOM

S24: Biology of Native and Invasive Populations of *Xenopus laevis*

Organizers Anthony Herrel & John Measey & Dennis Rödder

- 13:30 PM** Introduction
- 13:45 PM** Julien Courant
Are invasive populations characterized by a broader diet than native populations? The case study of an invasive anuran ID105
- 14:00 PM** John Measey
Overland movement of *Xenopus laevis* in southern Africa, and its implications to invasions ID613
- 14:15 PM** Anthony Herrel
Temperature dependence of locomotor performance in an invasive amphibian, *Xenopus laevis* ID099
- 14:30 PM** Flora Ihlow
Impacts of climate change on the global invasion potential of the African clawed frog *Xenopus laevis* ID104
- 14:45 PM** Dennis Rödder
Global realized niche divergence in the African clawed frog *Xenopus laevis* ID499
- 15:00 PM** Rui Rebelo
An evaluation of the efficiency of the *Xenopus laevis* eradication program in Portugal ID616
- 15:15 PM** Claudio Soto-Azat
High abundance of the invasive *Xenopus laevis* determines a low success of control ID533

MINGDE & MINGSI ROOM

S20: Water Balance Influencing the Life History of Amphibians and Reptiles

S21: Future Interactions Between Herpetology and Ecological/Evolutionary Physiology in a Changing World

Organizers Gustavo A. Agudelo-Cantero & Carla Bonetti Madelaire & Carlos Arturo Navas Ianinni & Fernando Ribeiro Gomes

- 13:30 PM** Barry Sinervo
Species distribution models of water loss and temperature regulation in amphibians: The threats of extinction from climate change ID586
- 13:45 PM** Agustín Guerrero Camacho
Linking behavioral thermoregulation and water loss in lizards ID590
- 14:00 PM** Fernando R. Gomes
Macroclimate and body mass influence interspecific physiological variation associated with water balance and thermal sensitivity in anurans ID588
- 14:15 PM** Carlos Arturo Navas
Microclimates in the Atlantic forest of Southern Brazil: hydrothermal gradients as a function of size and permeability ID587
- 14:30 PM** Carlos Arturo Navas
Physiological ecology or ecological physiology? true integration as a challenge for new herpetologists ID583
- 14:45 PM** Carlos Arturo Navas
Dry: physiological and ecological aspects of anuran aestivation in the Brazilian semiarid ID584
- 15:00 PM** Carla B. Madelaire
Effects of seasonality on metabolism and immunity of anurans in the Brazilian semi-arid (Caatinga) ID582
- 15:15 PM** Gustavo Adolfo Agudelo Cantero
Interactive effects of experimental heating rates, ontogeny and body mass on the upper thermal limits of anuran larvae ID575

TUESDAY 16TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 6 & 7

Taxonomy Systematics Phylogenetics

- Chair** Jia-tang Li
- 13:30 PM** **Fernando L. Torres-Pérez**
Species delimitation and biogeography of *Microlophus* (Sauria: Tropiduridae) of the "Chilean clade" using multilocus coalescent approaches **ID429**
- 13:45 PM** **Hinrich Kaiser**
Moving into Wallacea: diversity and biogeography of *Cyrtodactylus* in the eastern Indonesian islands and Timor-Leste **ID423**
- 14:00 PM** **Takuma Kaito**
Genetic structure and morphological cline in the Japanese coral snake, *Sinomicrurus japonicus* (Elapidae), endemic to the Ryukyu Archipelago, Japan **ID357**
- 14:15 PM** **Ying-han Wang**
Geographic variation of acoustic and morphometric traits in Ryukyu Kajika frog (*Buergeria japonica*) **ID280**
- 14:30 PM** **Aniruddha Datta-Roy**
Unveiling endemic skink radiations on the Indian subcontinent **ID005**
- 14:45 PM** **Jonathan J. Fong**
High genetic structure and human-mediated population expansion in the Oriental fire-bellied toad (*Bombina orientalis*) **ID029**
- 15:00 PM** **Jun Li**
Geologic events coupled with Pleistocene climatic oscillations drove genetic variation in the Omei treefrog (*Rhacophorus omeimantis*) in southern China **ID195**
- 15:15 PM** **Jing-song Shi**
Distribution and infraspecies taxonomy of *Gloydus halys* - *Gloydus intermedius* complex in China (Serpentes: Crotalinae) **ID249**

TIANHONG ROOM

Diversity Distribution

- Chair** Bickford David
- 13:30 PM** **Irina Maslova**
Brief ecological and faunistic review of terrestrial reptiles of the Russian Far East **ID056**
- 13:45 PM** **Priti Hebbar**
Habitat factors influencing the distribution of three endemic *Nyctibatrachus* species (Nyctibatrachidae) from central Western Ghats India **ID019**
- 14:00 PM** **João G. R. Giovanelli**
Natural history of amphibians supports species distribution modeling for conservation decisions **ID057**
- 14:15 PM** **Carlos Frederico Duarte da Rocha**
The invasive jackfruit tree (*Artocarpus heterophyllus*) in an area of the Atlantic Rainforest of Southeast Brazil: do leaf-litter frog community parameters change with the presence of the exotic? **ID122**
- 14:30 PM** **Johannes Penner**
Conservation priorities for vipers - a comprehensive global analysis **ID123**
- 14:45 PM** **Jins Vallanatu James**
What drives the species diversity patterns along an elevational gradient? A case study on reptiles in Agasthyamalai Hills, Western Ghats, India **ID129**
- 15:00 PM** **Wanigatunga Arachchige Dharshani Mahaulpatha**
Habitat occupancy of endangered rhino horned lizard (*Ceratophora Stoddartii*) in Horton plains national park, Sri Lanka **ID135**
- 15:15 PM** **Marcio Martins**
Assessing extinction risk in the megadiverse Brazilian snake fauna: process, results and perspectives **ID157**

TUESDAY 16TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 2

S30: The Secret Worlds of Caecilian Amphibians

Organizers Mark Wilkinson

15:45 PM Mark Wilkinson
Introduction

16:00 PM Alexander Kupfer
The evolution of parental care in caecilian amphibians ID513

16:15 PM Simon T. Maddock
Diversity, natural history, and conservation of the endemic caecilians of the Seychelles ID611

16:30 PM David J. Gower
New observations of caecilian reproductive and life history biology in the field and in captivity ID610

16:45 PM Hendrik Müller
Patterns of axial elongation in caecilian amphibians (Lissamphibia: Gymnophiona) ID493

17:00 PM Rachunliu G. Kamei
Re-assessment of the diversity and taxonomy of Asian caecilian genus *Ichthyophis* Fitzinger, 1826 (Ichthyophiidae, Gymnophiona) from northeast India ID607

17:15 PM Mark Wilkinson
On the evolution of lunglessness in caecilians and other amphibians ID609

MINGRUI ROOM

S23: Ecology, Evolution and Impacts of Alien Amphibians and Reptiles

Organizers Yi-ming Li

15:45 PM Fred Kraus
Management of invasive reptiles and amphibians: progress and needs for improvement ID315

16:00 PM John Measey
A global assessment of alien amphibian impacts in a formal framework ID145

16:15 PM Richard Shine
Controlling invasive cane toads by targeting the larval phase ID215

16:30 PM Lin Schwarzkopf
Controlling invasive amphibians using sex appeal ID601

16:45 PM Georgia Ward-Fear
Ecological Immunisation: Buffering the impact of cane toads on Floodplain monitors ID051

17:00 PM Xuan Liu
Invasion ecology of the American bullfrog (*Lithobates catesbeianus*) in China: introduction, establishment and impacts ID305

17:15 PM Aidan Mackay
Alien frogs: direct and indirect impacts on native species in the UK ID363

17:30 PM K. Heidy Kikillus
Developmental degree-day models to assess the establishment potential of three exotic turtle species in New Zealand ID208

17:45 PM Yi-ju Yang
The establishment and spread of alien tree frog (*Polypedates megacephalus*) in Taiwan ID225

MINGDE & MINGSI ROOM

S21: Future Interactions Between Herpetology and Ecological/Evolutionary Physiology in a Changing World/

Organizers Carlos Arturo Navas & Fernando Ribeiro Gomes

15:45 PM Georgia Karoline Kosmala
Thermal and hydric impacts on the locomotor performance of cane toads: comparisons between native-range and invasive populations ID581

16:00 PM Jean-Marc Hero
Evaluating climate change vulnerability of a subtropical mountain-top terrestrial ectotherm ID580

16:15 PM Jamie Voyles
Understanding shifts in immunological defenses in amphibians following chytridiomycosis outbreaks ID585

16:30 PM Agustin Guerrero Camacho
The voluntary thermal maximum: a forgotten thermal threshold with a much greater ability to detect climatic impacts on lizards ID579

16:45 PM Renata Brandt
Integrative analysis of sexual dimorphism in lizards: morphology, functional significance and selection ID578

17:00 PM Tiana Kohlsdorf
Comparative physiology in neotropical lizards: how distinct thermal environments impacts organismal performance and thermoregulatory behavior in Tropiduridae ID577

17:15 PM Bao-jun Sun
Tropical *Takydromus* lizards have limited capability of metabolic acclimation in response to temperature variation ID576

17:30 PM Lin Zhang
Phylogenetic, curvature and metabolic scaling in reptiles ID621

17:45 PM Xiao-long Tang
A brief introduction of high altitude adaptive characteristics and possible mechanisms in *Phrynocephalus vlangalii* ID564

18:00 PM Carla Bonetti Madelaire
Future interactions between herpetology and ecological/evolutionary physiology in a changing world ID440

TUESDAY 16TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 6 & 7

Ecology Ethology

Chair **Martin J. Whiting**

15:45 PM Mathieu Denoël

Behavioural avoidance of newts in response to an aquatic invader: context-dependent patterns and fitness consequences ID027

16:00 PM Guy Sion

Brain laterality and social status in lizards: Asymmetry of bite scars and dominant leg in the gecko *Ptyodactylus guttatus* ID028

16:15 PM Marco D. Barquero

Signal repertoire and contest outcome in the Jacky dragon ID037

16:30 PM Marcus Michelangeli

A novel behavioural syndrome and its link to microhabitat selection in an Australian lizard ID049

16:45 PM Eduard Artashesovich Galoyan

Do parthenogenetic lizards prefer sex when possible? Ecological, behavioural and cytogenetic features of complex population comprising of two parthenogenetic, one bisexual species and their hybrids of rock lizards (*Darevskia*, *Zauria*) in Armenia ID055

17:00 PM John D. Krenz

Blanding's turtles (*Emydoidea blandingii*) use a sun compass during natal dispersal ID153

17:15 PM David A. Penning

The king of snakes: performance and morphology of intraguild predators (*Lampropeltis*) and their prey (*Pantherophis*) ID068

17:30 PM Allan Muth

Home range estimation for the Coachella valley fringe-toed lizard, *Uma inornata* ID072

17:45 PM Osamu Sakai

Do clonal geckos (*Lepidodactylus lugubris*) have personality and increase its variation with growing up? ID412

TIANHONG ROOM

Genetics Development Morphology Biogeography

Chair **Si-min Lin**

15:35 PM Judit Vörös (MINI-PLenary SPEAKER)

Pannonian Plain served as northerly refugia for amphibians in Central Europe ID086

16:00 PM Martina Gregorovičová

Presence of the interventricular septum as a substrate for the ventricular conduction system in monitor lizards ID087

16:15 PM Markus Lambertz

Reptilian lungs: keys to understanding the evolution of terrestrial air-breathing vertebrates ID094

16:30 PM John Dale Roberts

What determines paternity success in the polyandrous frog *Crinia georgiana*: position, time, body size or testis mass? ID106

16:45 PM Gayani Senevirathne

Comparative postembryonic skeletal ontogeny in two sister lineages of Old World tree frogs (Rhacophoridae: *Taruga*, *Polypedates*) ID257

17:00 PM Luke J. Easton

Skeletal morphology of New Zealand leiopelmatid frogs: regional variation or cryptic diversity? ID360

17:15 PM Chris Broeckhoven

A non-invasive protocol for *in vivo* micro-CT imaging of lizards ID361

17:30 PM Weronika Rupik

Ultrastructural differentiation of the thyroid in Squamata ID413

WENSday 17th AUGUST – PROGRAM AT A GLANCE

	JINGCHAO HALL	MINGDU ROOM 2	MINGRUI ROOM	MINGDE & MINGSI ROOM	MINGDU ROOM 6 & 7	TIANHONG ROOM	TIANHE ROOM
08:30 AM	CHAIR <u>Richard Shine</u> Plenary Four Ever Since Gondwana: The Influence of Changing Climate, Fragmenting Forest, and Spreading Savanna on the Biogeography of African Reptiles Krystal Tolley						
09:15 AM	Plenary Five Ethnoherpetology: Perspectives and Conservation Indraneil Das						
10:00 AM	Coffee Break						
10:15 AM	<i>Symposium 3</i>	<i>Symposium 19</i>	<i>Multi-disciplinary</i>	<i>Symposium 13</i>	<i>Multi-disciplinary</i>		
12:15 PM	Lunch in Cafe Mediterranean						
13:30 PM		<i>Symposium 19</i>	<i>Symposium 18</i>	<i>Symposium 13</i>	<i>Ecology Ethology</i>	<i>Diversity Distribution</i>	<i>Symposium 17</i>
15:30 PM	Coffee Break						
15:45 PM		<i>Symposium 19</i>	<i>Symposium 18</i>	<i>Symposium 13</i>	<i>Landscape Conservation Genetics</i>	<i>Genetics Development Morphology Biogeography</i>	<i>Symposium 17</i>
		13:30 PM to 17:30 PM in Minghou room (round table) <i>Symposium 26: Publishing Herpetological Journal Articles in a Globalized World</i> <i>Symposium 27: Herpetological Information in a Networked World</i>					
18:00 PM	Dinner in Cafe Mediterranean						
19:00 PM				SDMs Workshop in Gui room			
19:30 PM				Poster session in the corridor on the fourth floor of the venue			

WENSDAY 17TH AUGUST – PROGRAM IN DETAILS

JINGCHAO HALL

S3: Ontogeny Creates Phylogeny – How Can a Developmental Approach Contribute to Herpetology?

Organizers **Nathalie Feiner & Tobias Uller**

10:15 AM **Juan Pascual-Anaya**

Transcriptomic and epigenomic analysis of the turtle carapace **ID302**

10:30 AM **James Hanken**

Using transgenic tools to answer longstanding questions regarding the evolution and development of the kull in amphibians and other vertebrates **ID058**

10:45 AM **Nathalie Feiner**

How do wall lizard embryos adapt to cold climate? **ID039**

11:00 AM **Michael Richardson**

Evolution and development of reptiles: from genomes to venoms **ID612**

11:15 AM **Francisca M. Leal-Carvajalino**

Limb-specific non-coding DNA regulatory elements and the evolution of limblessness in snakes **ID557**

11:30 AM **Mateusz Hermyt**

Eggtooth development in the grass snake *Natrix natrix* L. (Squamata, Natricidae) embryos **ID399**

11:45 AM **Ryan Kerney**

Microbial symbionts of amphibian egg capsules **ID059**

12:00 AM **Yasunori Murakami**

Development of the thalamo-telencephalic projection in reptiles **ID046**

MINGDU ROOM 2

S19: Ecology and Physiology of Amphibians and Reptiles: Challenges Caused by Global Climate Change

Organizers **Nora Ruth Ibargüengoytia & Carlos Arturo Navas Ianinni & Susana Marlin Medina & Carla Piantoni**

10:15 AM **Nora R. Ibargüengoytia**

Introduction

10:30 AM **Barry Sinervo**

Ecophysiological species distribution models for reptiles and amphibians and the risk of extinction from climate change **ID618**

10:45 AM **Leonardo D. Bacigalupe**

Climate change and geographic distributions: the importance to include phenotypic plasticity and geographic variation on mechanistic models **ID248**

11:00 AM **Elvire Bestion**

Climate impacts on a lacertid lizard: from the individual to the community **ID221**

11:15 AM **Margarita Chiaraviglio**

Sexual selection and environmental change **ID556**

11:30 AM **Susana Clusella-Trullas**

Can ectotherms buffer climate change through behaviour? **ID200**

11:45 AM **Discussion**

MINGRUI ROOM

Multi-disciplinary

Chair **Cui-juan Niu**

10:15 AM **Xi-xi Liang**

The mitochondrial genomes of Megophryidae **ID511**

10:30 AM **Tashitso Anamza**

Morphological pattern in populations of the milk snake *Lampropeltis triangulum* reflects intergradation at their contact zone in the KS/MO border **ID547**

10:45 AM **Gentile Francesco Ficetola**

What determines biogeographical patterns of amphibians and reptiles: the past, the present and the humans **ID544**

11:00 AM **Shelley Edwards**

Morphology and performance is linked to predator escape strategy in desert lizards (*Meroles*, Lacertidae, Squamata) **ID004**

11:15 AM **Yu-san Yang**

Poison frog males bias aggression towards a similar color morph when in allopatry but not in sympatry **ID092**

11:30 AM **Shan-ta Tao**

Examining the pattern of character displacement of two sympatric agamid lizards in northern taiwan by species distribution model **ID491**

11:45 AM **Moacir Tinôco**

A novel herpetofauna biodiversity hotspot on the north coast of Bahia, Brazil **ID402**

12:00 AM **Erin K. Kenison**

Advancing head-start techniques for Eastern Hellbenders: the influence of environmental conditioning on body size, tail shape, and swim performance **ID261**

WEDNESDAY 17TH AUGUST – PROGRAM IN DETAILS

MINGDE & MINGSI ROOM

S13A: Captive Breeding and Conservation Strategies for Amphibians and Reptiles

Organizers Hank Jenkins

- 10:15 AM** Robert W.G. Jenkins
Captive husbandry and conservation of reptiles and amphibians: an overview ID277
- 10:30 AM** Daniel J.D. Natusch
Conservation implications of the commercial captive breeding of snakes ID212
- 10:45 AM** Chris J. Newman
Conservation through commercialisation: a pragmatic way forward ID313
- 11:00 AM** Gang Liang
A review of research on conservation and breeding of the Chinese giant salamander (*Andrias davidianus*) ID498
- 11:15 AM** Peter S. Harlow
Captive breeding of extinct-in-the-wild lizards from Christmas Island, Australia ID217
- 11:30 AM** Bálint Halpern
Conservation breeding program of Hungarian meadow vipers (*Vipera ursinii rakosiensis*) ID540
- 11:45 AM** Luiza F. Passos
Are captive Golden Mantella frogs (*Mantella aurantica*) fit to be wild? How captivity is affecting individuals' skin colour reflectance ID201
- 12:00 AM** Discussion

MINGDU ROOM 6 & 7

Multi-disciplinary

- Chair** Yuan-ting Jin
- 10:15 AM** Rafael O. de Sá
Phylogeny of the South American genus *Chiasmocleis* Mehely 1904 (Microhylidae: Gastrophryninae) ID264
- 10:30 AM** Meng-yun Chen
Selecting question-specific genes to reduce incongruence in phylogenomics: a case study of jawed vertebrate backbone phylogen ID292
- 10:45 AM** Senczuk Gabriele
A combination of long term fragmentation and glacial persistence have driven the evolutionary history of the Italian wall lizard *Podarcis siculus* ID311
- 11:00 AM** João Tonini
Fully-sampled phylogenies of squamates reveal evolutionary patterns in threat status ID317
- 11:15 AM** Chao-chao Hu
Genetic, morphological and ecological divergence among toad-headed lizards in the *Phrynocephalus vlangalii* species complex (Agamidae) ID509
- 11:30 AM** Mahmood Sasa
Reproductive phenology and secondary productivity in a Tropical Dry Forest anuran assemblage in Costa Rica ID450
- 11:45 AM** Fan-rong Xiao
Background matching and camouflage efficiency predict population density in four-eyed turtle (*Sacalia quadriocellata*) ID291
- 12:00 AM** Liu Lin
Field reproduction research of Beal's Eyed Turtle *Sacalia bealei* at Fujian province, China ID395

WENSDAY 17TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 2

S19: Ecology and Physiology of Amphibians and Reptiles: Challenges Caused by Global Climate Change

Organizers	Nora Ruth Ibargüengoytia & Carlos Arturo Navas Ianinni & Susana Marlin Medina & Carla Piantoni
13:30 PM	Alison Cree Thermal biology and life history of New Zealand lizards: possible responses to climate change in a South-Pacific archipelago ID353
13:45 PM	Buddhi Dayananda Predicted increases in nest temperatures affect long-term survival of hatchling geckos ID013
14:00 PM	Lumir Gvoždík Behavioral thermoregulation and species interactions: a newt tale ID169
14:15 PM	Nora Ibargüengoytia Global warming impact on lizards of the highlands of the Andes and Patagonia Argentina ID321
14:30 PM	Michael L. Logan Climate change as an agent of selection in lizards ID172
14:45 PM	Fausto R. Méndez-De la Cruz Past and present of two related species with different reproductive mode facing global warming ID539
15:00 PM	Discussion

MINGRUI ROOM

S18: Physiological Mechanisms and Ecological Consequences of Developmental Plasticity in Reptile Embryos

Organizers	Wei-guo Du & Daniel Warner
13:35 PM	Daniel Warner Developmental plasticity in reptiles: Introduction to the symposium
13:50 PM	Wei-guo Du (MINI-PLENARY SPEAKER) How do reptile embryos cope with unpredictable variation in nest temperatures? ID475
14:15 PM	Lisa E. Schwanz Incubation temperature and developmental plasticity in reptiles: A systematic review and meta-analysis ID174
14:30 PM	David Booth The influence of incubation temperature on sea turtle hatchling quality ID627
14:45 PM	Ricky J. Spencer It is all about temperature in turtles ID100
15:00 PM	Vaughn Stenhouse Predicting reptile distributions as a function of incubation temperature ID154
15:15 PM	Arthur Georges Developmental plasticity and sex determination in reptiles ID573

MINGDE & MINGSI ROOM

S13B: Captive Breeding and Conservation Strategies for Amphibians and Reptiles

Organizers	Jeff Dawson & Gemma Harding
13:30 PM	Jeff Dawson Amphibians in zoos: their status, role and barriers to holding them ID406
13:45 PM	Benjamin Tapley Amphibians and conservation breeding programmes: do all threatened amphibians belong on the ark? ID137
14:00 PM	Michael McFadden <i>Ex-situ</i> amphibian conservation: an Australian approach to prioritisation, collaboration and program outcomes ID250
14:15 PM	Phillip J. Bishop Linking <i>ex-situ</i> research to in-situ conservation – a winning combination ID454
14:30 PM	Gemma Harding Are amphibian reintroductions conforming to IUCN guidelines? ID267
14:45 PM	Claudio Soto-Azat Rescue of the endangered Darwin's frog from a volcanic eruption ID202
15:00 PM	Matt Göetz The mountain chicken frog recovery programme: benefits and challenges of the captive breeding aspect ID325
15:15 PM	Marcileida Dos Santos Using zoo collections for education: are zoo visitors aware of amphibian declines? ID063

WENSDAY 17TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 6 & 7

Ecology Ethology

Chair	Jian-guo Cui
13:30 PM	Martin Whiting Testing multiple hypotheses for the evolution of conspicuous signals reveals a diemantic display in a Chinese lizard ID210
13:45 PM	Patricia A. Ramírez Fine-scale movements of two terrestrial New Zealand endemic frogs ID118
14:00 PM	Eduard Artashesovich Galoyan Life span and social complexity in lizard communities ID147
14:15 PM	Juan Lei How best to protect the nests of the endangered loggerhead turtle <i>Caretta caretta</i> from monitor lizard predation? ID064
14:30 PM	Teppej Jono Signal pattern collapse associated with loss of species recognition in gecko lizards ID175
14:45 PM	Xue Bian Using virtual technologies to investigate motion displays of lizards: a new paradigm for detailed consideration of motion signal efficacy ID183
15:00 PM	Julia L. Riley Early social environment affects behavioural development in a family-living lizard ID189
15:15 PM	Mei-hua Zhang Sexual dimorphism in forelimb bones of stream-dwelling frogs in China ID562

TIANHONG ROOM

Diversity Distribution

Chair	Jun-hua Hu
13:30 PM	Ángela María Mendoza Latitudinal diversity patterns in higher taxa of New World amphibians ID188
13:45 PM	Edgar Lehr Herpetological inventory and conservation assessment of the Pui Pui protected forest in central Peru ID227
14:00 PM	Gvozdk V Evolutionary history of a leaf-litter frog, <i>Phrynobatrachus auritus</i> , uncovers the history of the Central African lowland rainforests ID253
14:15 PM	Naoki Kamezaki Importance of East China Sea for the life history of the north Pacific loggerhead sea turtle, <i>Caretta caretta</i> ID265
14:30 PM	Matthew P. Heinicke The measure of success: geographic isolation promotes diversification in <i>Pachydactylus</i> geckos ID329
14:45 PM	Jelka Crnobrnja-Isailovic Transition, urbanization approach and degree of impoverishment of local batracho- and herpetofauna ID356
15:00 PM	Wei-wei Zhou Contrasting population structure and demographic history generated by different geographic features in eastern Qinghai-Tibet Plateau ID373
15:15 PM	Karlsson Catharina <i>Ansonia platysoma</i> , the effect of habitat variables on occupancy ID054

TIANHE ROOM

S17: Conservation Biology of Crocodilians

Organizers	Xiao-bing Wu & Mark Merchant
13:30 PM	Introduction
13:45 PM	Mark Merchant Crocodiles can alter skin color in response to environmental light conditions ID648
14:00 PM	Sheng-guo Fang The effect of incubation temperature on sex ratio of the Chinese alligator (<i>Alligator sinensis</i>) ID047
14:15 PM	Marisa Tellez Caye Crocin': population management and parasitism of <i>Crocodylus acutus</i> in Caye Caulker, Belize ID649
14:30 PM	Jin-hong Zhao Analysis on diversity of the intestinal parasites in captive Chinese alligator <i>Alligator sinensis</i> and the biological research of the new nematode <i>Ortleppascaris sinensis</i> ID484
14:45 PM	Charlie Manolis Sustainable use of Crocodilians as a conservation tool ID651
15:00 PM	Xiao-bing Wu Fortune of the Chinese alligator: protecting a species on the edge of extinction for Forty years ID652
15:15 PM	Matthew H. Shirley Cave isolation sparks ecological and evolutionary divergence in the African dwarf crocodile (<i>Osteolaemus tetraspis</i>) ID650

WENSDAY 17TH AUGUST – PROGRAM IN DETAILS

MINGHOU ROOM
S26: Publishing Herpetological Journal Articles in a Globalized World

Organizers **Robert Jehle**

13:30 PM **Robert Jehle**
Herpetological Journal

13:45 PM **Hinrich Kaiser**
Herpetological Notes

14:00 PM **John Measey**
African Journal of Herpetology

14:15 PM **Jörn Köhler**
Salamandra

14:30 PM **Alexander Kupfer**
Salamandra & Journal of Comparative Zoology

14:45 PM **Gad Perry**
Journal of Herpetology

15:00 PM **Chen Yang**
Asian Herpetological Research

15:15 PM **Peter Uetz**

WENSDAY 17TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 2

S19: Ecology and Physiology of Amphibians and Reptiles: Challenges Caused by Global Climate Change

- Organizers** Nora Ruth Ibargüengoytia & Carlos Arturo Navas Ianinni & Susana Marlin Medina & Carla Piantoni
- 15:45 PM** Carlos A. Navas
Known unknowns on anuran water balance: implications to evaluate the impacts on climate change **ID542**
- 16:00 PM** Carla Piantoni
Short terms positive response to warming on the growth of a Brazilian common lizard **ID194**
- 16:15 PM** Stephanie J. Price
Will a warming climate produce “smarter” reptiles? Ambient temperature and learning performance in the tuatara (*Sphenodon punctatus*) **ID150**
- 16:30 PM** Erin L. Sauer
Influence of temperature preference and behavioral thermoregulation on disease resistance **ID156**
- 16:45 PM** Richard Tracy
Complexities in estimating the effects of climate change on reptile populations **ID287**
- 17:00 PM** Li Ma
Are viviparous lizards more vulnerable to climate warming because they have evolved reduced body temperature and heat tolerance? **ID628**
- 17:15 PM** Yan-qing Wu
Low oxygen availability as a constraint on the length of egg retention: evidence from an oviparous snake, *Rhabdophis tigrinus lateralis* **ID599**
- 17:30 PM** Discussion

MINGRUI ROOM

S18: Physiological Mechanisms and Ecological Consequences of Developmental Plasticity in Reptile Embryos

- Organizers** Wei-guo Du & Daniel Warner
- 15:45 PM** Lukas Kratochvil
Stability of sex chromosomes in squamate reptiles: implications for molecular sexing and transitions in sex determination **ID393**
- 16:00 PM** Jun Ping
Role of Dmrt1 in temperature-dependent sex determination of the Japanese gecko, *Gekko japonicus* (Squamata: Gekkonidae) **ID238**
- 16:15 PM** Tariq Ezaz
Comparative genomics of sex chromosome evolution in reptiles: shared ancestry or convergence? **ID574**
- 16:30 PM** Buddhi Dayananda
Will early hatchlings toast? **ID093**
- 16:45 PM** Hong Li
Potential targets for selection during the evolution of viviparity in cold-climate reptiles **ID211**
- 17:00 PM** Shu-ran Li
Why do female desert lizards construct burrows to lay eggs? **ID214**
- 17:15 PM** Daniel A. Warner
Do seasonal changes in developmental temperature have season-specific fitness consequences in a lizard? **ID427**
- 17:30 PM** Corey D. Cates
The adaptive significance of developmental plasticity in the wild: an experimental test using the brown anole lizard (*Anolis sagrei*) **ID531**

MINGDE & MINGSI ROOM

S13B: Captive Breeding and Conservation Strategies for Amphibians and Reptiles

Organizers Jeff Dawson & Gemma Harding

Round table discussion

- 15:45 PM** Jeff Dawson
Benjamin Tapley
Michael McFadden
Phil Bishop
to Gemma Harding
Claudio Soto-Azat
17:30 PM Matt Göetz
Marcileida Dos Santos

WENSDAY 17TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 6 & 7

Landscape Conservation Genetics

Chair Bao-wei Zhang

15:45 PM Amaël Borzée

Correlation between the American bullfrog-borne *Bd* and population decline in an endangered treefrog species **ID018**

16:00 PM Johara Bourke

Evolutionarily Significant Unit concept and its applicability in conservation: the Darwin's frog (*Rhinoderma darwini*) case **ID070**

16:15 PM Jie Wang

Genetic bottlenecks of an EDGE species in karst caves **ID376**

16:30 PM Pamela L. Rutherford

Conservation of an endangered lizard species (*Plestiodon septentrionalis*) in Canada **ID131**

16:45 PM R.G. Bina Perl

Scrutinising the survivors: population structure of the rediscovered Hula painted frog and implications for future conservation actions **ID173**

17:00 PM Rod N. Williams

Applying next generation sequencing technologies to detect emerging infectious diseases in reptiles and amphibians **ID504**

17:15 PM Johara Bourke

Genetic population structure of the yellow-bellied toad (*Bombina variegata*) in Germany and its implications for conservation **ID071**

17:30 PM James Baxter-Gilbert

The adaptive responses of Eastern Water Dragons (*Intellagama lesueurii*) to Urbanisation **ID281**

TIANHONG ROOM

Genetics Development Morphology Biogeography

Chair Xiao-mao Zeng

15:45 PM Magdalena Kowalska

Structural, ultrastructural studies and 3D reconstruction of developing pancreas in grass snake *Natrix natrix* L. (Squamata, Natricidae) **ID419**

16:00 PM Paweł Kaczmarek

Embryonic development of vomeronasal organ in the grass snake, *Natrix natrix* (Squamata: Natricidae) **ID404**

16:15 PM Mizuki Takahashi

Seasonal and daily fluctuation of environmental DNA of the eastern hellbender, *Cryptobranchus a. alleganiensis* **ID318**

16:30 PM Anthony Lau

Population genetic structure of the Hong Kong newt (*Paramesotriton hongkongensis*) **ID362**

16:45 PM Zheng-jun Wu

Genetic diversity and multiple paternity of *Shinisaurus crocodilurus* **ID483**

17:00 PM Zhi-yong Yuan

Red River barrier and Pleistocene climatic fluctuations shaped the genetic structure of *Microhyla fissipes* complex (Anura: Microhylidae) in southern China and Indochina **ID495**

17:15 PM Gabriel Jorgewich Cohen

Population genetics of Brazilian populations of the American bullfrog, an invasive species from North America **ID522**

17:30 PM Rachel Montesinos

Vocal sacs in Hylodidae (Amphibia, Anura) **ID543**

TIANHE ROOM

S17: Conservation Biology of Crocodilians

Organizers Xiao-bing Wu & Mark Merchant

15:45 PM Huan Wang

The influence of sex steroid receptors on follicular development of the Chinese alligator *Alligator sinensis* **ID449**

16:00 PM Ruhana Hassan

Research notes on the wild *Tomistoma* populations in Western Sarawak, Malaysian Borneo **ID097**

16:15 PM Ji Huang Mazák

A new paleolithic ecomorph of Chinese alligator (*Alligator sinensis* ssp) from Songjiang, Shanghai **ID077**

16:30 PM Peng Yan

Phylogeny of order Crocodylia based on the mitochondrial genomes **ID477**

16:45 PM R.J. RAO

Long-term studies on reintroduction of Indian Gharial (*Gavialis gangeticus*) in India **ID619**

17:00 PM Fang Zhang

Relationship between nest defence behaviours and reproductive benefits in Chinese alligators **ID259**

17:15 PM Muhammad Saleem Chang

Captive breeding and conservation status of marsh crocodiles (*Crocodylus palustris*) in New Jatoti farm Naushehroferoze, Sindh, Pakistan **ID079**

17:30 PM Pablo Siroski

Crocodilian management programs and the Argentinean experience **ID655**

WENSDAY 17TH AUGUST – PROGRAM IN DETAILS

MINGHOU ROOM
S27: Herpetological Information in a Networked World

Organizers **Peter Uetz**

Peter Uetz

David C. Blackburn
Creating digital 3D resources for
phenotypes of the world's amphibians
and reptiles **ID430**

15:45 PM

Bo Cai
The study of Red List for Chinese reptiles
ID266

to

Fabián Bonilla-Murillo

John J. Wiens
Using phylogenetic (and other)
databases for large-scale herpetological
research **ID464**

17:30 PM

Robert Jehle

Gad Perry

Open discussion

THURSDAY 18TH AUGUST – PROGRAM AT A GLANCE

	GUI ROOM	MINGDU ROOM 2
08:00 AM	<i>SDMs Workshop</i>	
08:30 AM	<i>Mid-conference excursion</i> You will be picked up by a bus at 08:15 AM from the front square of New Century Grand Hotel, and you will be returned back to the same hotel around 17:30 PM.	
12:15 PM	Lunch in Cafe Mediterranean	
18:00 PM	Dinner in Cafe Mediterranean	
19:00 PM		<i>CHS Meeting</i>

FRIDAY 19TH AUGUST – PROGRAM AT A GLANCE

	JINGCHAO HALL	MINGDU ROOM 2	MINGRUI ROOM	MINGDE & MINGSI ROOM	MINGDU ROOM 6 & 7	TIANHONG ROOM
08:30 AM	CHAIR <u>Aaron M. Bauer</u> <i>Plenary Six</i> A Challenging World for Frogs					
09:15 AM	Paula Cabral Eterovick <i>Plenary Seven</i> Systematics and Biogeography of the East Asian Herpetofauna, with Emphasis on the Recent Contributions from the Molecular, Cytogenetic, and Fossil Studies Hidetoshi Ota					
10:00 AM	Coffee Break					
10:15 AM	<i>Symposium 15</i>	<i>Symposium 9</i>	<i>Symposium 29</i>	<i>Symposium 25</i>	<i>Taxonomy Systematics Phylogenetics</i>	<i>Multi-disciplinary</i>
12:15 PM	Lunch in Cafe Mediterranean					
13:30 PM		<i>Symposium 11</i>	<i>Symposium 6</i>	<i>Symposium 25</i>	<i>Ecology Ethology</i>	<i>Adaptation Evolution</i>
15:30 PM	Coffee Break					
15:45 PM		<i>Symposium 11</i>	<i>Symposium 6</i>	<i>Symposium 25</i>	<i>Recovery Restoration</i>	<i>Adaptation Evolution</i>
18:00 PM	Dinner in Cafe Mediterranean					
19:30 PM		WCH 2020 Bids & Auction				

FRIDAY 19TH AUGUST – PROGRAM IN DETAILS

JINGCHAO HALL

S15: Chinese Giant Salamander Conservation: From Genes to Farms

Organizers Andrew A. Cunningham & Jing Che

10:15 AM Andrew Cunningham

Introductory presentation

10:30 AM Shu Chen/ Benjamin Tapley

Range wide ecological surveys for the Chinese giant salamander (*Andrias davidianus*) ID594

10:45 AM Samuel T. Turvey

Assessing the comparative effectiveness of field-based and community-based approaches for surveying the Chinese giant salamander (*Andrias davidianus*) across China ID595

11:00 AM Fang Yan

Genetic survey reveals human influence on the Chinese giant salamander (*Andrias davidianus*) ID596

11:15 AM Andrew Cunningham

Pathogen survey of wild and farmed Chinese giant salamanders (*Andrias davidianus*) ID591

11:30 AM Shu Chen

The importance of public outreach: changing attitudes and behaviours for CGS conservation ID597

11:45 AM Sumio Okada

Comparative ecology of the Chinese and Japanese giant salamanders in their natural habitats ID593

12:00 AM Michael Lau

Policy implications of the latest research in Chinese giant salamander conservation ID592

MINGDU ROOM 2

S9: The Evolution of Reptiles on Islands: Patterns and Processes

Organizers Claudia Corti & Anthony Herrel

10:15 AM Claudia Corti

Life on islets and rocks: some case studies from the Mediterranean ID636

10:30 AM Anthony Herrel

Islands as model systems for the study of rapid adaptive divergence ID098

10:45 AM Jason R. Ali

A scheme for classifying biotic assemblages on marine islands that utilizes land-locked terrestrial vertebrates, mainly squamates and amphibians ID336

11:00 AM Marcio Martins

Why we should consider snake populations from land-bridge islands as taxonomically distinct from mainland populations ID426

11:15 AM Krystal A. Tolley

Sky islands of Africa and the evolutionary history of chameleons ID633

11:30 AM Akira Mori

Cold night foraging of a pitviper on subtropical islands: thermal preference or exploitation of winter bonanza? ID485

11:45 AM Paul M. Oliver

Lizards of the lost Arc: Persistence and Marginalisation in an Australasian gecko lineage ID640

12:00 AM 5-min talks

Shohei Komaki-ID386

Jung-ya Hsu-ID159

Lu-Yi Wang-ID171

Hui-yun Tseng-ID220

Claudia Corti-ID634

MINGRUI ROOM

S29: Ethnoherpetology

Organizers Indraneil Das

10:15 AM Introduction

10:30 AM Phillip J. Bishop

Māori traditional knowledge of native frogs (*Leiopelma* spp.) in New Zealand ID442

10:45 AM Carla C. Eisemberg

Connections between local taboos and reptile conservation projects in Papua New Guinea and Timor-Leste ID487

11:00 AM Engkamat Lading

Roles of mythologies in crocodile conservation in Sarawak ID645

11:15 AM Raúl Gómez Trejo Pérez

Presence and symbolisms of amphibians and reptiles in Mexican prehispanic cultures ID374

11:30 AM Discussion

FRIDAY 19TH AUGUST – PROGRAM IN DETAILS

MINGDE & MINGSI ROOM

S25: From Canterbury to Hangzhou: Lessons Learned on the Threat of Emergent Infectious Diseases (EID's) to Herpetofauna

Organizers Frank Pasmans & Jean-Marc Hero

10:15 AM Claudio Soto-Azat

Impacts of amphibian emerging infectious diseases in a biodiversity hotspot in Chile ID182

10:30 AM Hong Liu

Comparison of droplet digital PCR to real-time PCR for quantitative detection of Giant salamander iridovirus ID158

10:45 AM Frank Pasmans

Devrieseasis: an emerging infectious disease threatening endangered lizards ID177

11:00 AM Matthew J. Gray

Pathogens versus pesticides: what is the greater threat to eastern hellbenders? ID109

11:15 AM Matthew J. Gray

From Chinese giant salamanders to Mississippi gopher frogs: the threat of ranaviruses to rare species and global biodiversity ID107

11:30 AM David C. Blackburn

Amphibia Web's response to the global emerging infectious disease crisis in amphibians ID431

11:45 AM Yi-zhang Wang

The first report of blood parasites Hepatozoon sp. and microfilaria in an insular agamid lizard *Japalura swinhonis* ID300

12:00 AM Sandra V. Flechas

Skin microbiota composition associated with differential susceptibility to chytrid fungus infection across life stages in Andean frogs ID048

MINGDU ROOM 6 & 7

Taxonomy Systematics Phylogenetics

Organizers Jonathan J. Fong

10:15 AM Song Huang

Phylogeography of the genus *Azemiops* ID350

10:30 AM Torres-Pérez, F

Genetic divergence and phylogeographic structure of a *Liolaemus* (Iguania: Liolaemini) species in sky islands of central Chile ID433

10:45 AM Alexander S. Hall

Genetic Characterization of Unisexual *Aspidoscelis tessellata* and *A. dixonii* ID438

11:00 AM Jiang-ni Li

Development of intron markers for snakes and their phylogenetic performance at both higher and intra-genera levels ID444

11:15 AM Jeffrey Streicher

Phylogenomic analyses reveal novel relationships among snake families ID448

11:30 AM Mamoru Toda

Species delimitation and biogeography of the Ryukyu ground geckos (Squamata: Eublepharidae), *Goniurosaurus k. kuroiwae* and *G. k. orientalis*, revealed by mitochondrial and nuclear DNA markers ID470

11:45 AM Tomohisa Makino

Phylogeography of Ryukyu short-legged skink, *Ateuchosaurus pellopleurus*, as inferred from mitochondrial cytochrome b sequences ID520

12:00 AM Chen-hong Li

Exon enrichment for phylogenetics and population Genetics in Reptiles ID256

12:15 PM Santiago R. Ron

Phylogenetic relationships, bioacoustics and taxonomic revision of the *Dendropsophus leucophyllatus* and *D. triangulum* species complex (Anura: Hylidae) ID015

TIANHONG ROOM

Multi-disciplinary

Organizers Qiang Chen

10:15 AM El Mouden El Hassan

Spatial and thermal ecology of *Mauremys leprosa* (Schweigger, 1812) in two contrasted environments (naturel vs polluted) in Marrakech, Morocco ID284

10:30 AM Takashi Haramura

Biotic resistance to an alien cane toad: larval competition between native frogs and invasive toads ID273

10:45 AM Jun Moriyama

Phylogeography of the Japanese forest ratsnake, *Euprepiophis conspicillatus* (Serpentes: Colubridae) ID469

11:00 AM Liu-wang Nie

Consecutive parthenogenesis first discovered in *Mauremys megalocephala* and its molecular genetic evidence ID647

11:15 AM Salgado C. Carolina

Ceratophrys ornata (Anura: Ceratophryidae) tadpoles: new insights in sound emission and its disruption by the insecticide chlorpyrifos ID066

11:30 AM Mark Feldman

A long term evaluation of new methods to induce egg laying in turtles ID082

11:45 AM Shigeharu Akiyama

Development of techniques for captive breeding of endangered salamanders ID146

12:00 AM Gerald Kuchling

Artificial reproductive techniques to rescue the critically endangered Giant Yangtze Softshell Turtle *Rafetus swinhoei* from extinction ID422

FRIDAY 19TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 2

S11: Biodiversity and Monitoring of Amphibians and Reptiles

- Organizers** Jian-ping Jiang & John Measey
- 13:35 PM** **Natalia B. Ananjeva**
(MINI-PLenary SPEAKER)
Distribution modeling and environmental suitability of Asian rock agamas of *Paralaudakia* genus ID091
- 14:00 PM** **Jun Wu**
An overview of national amphibian monitoring network in China ID567
- 14:15 PM** **Yolarnie Amepou**
Community engagement in the conservation and management of the declining pig-nosed turtle (*Carettochelys insculpta*) in Kikori, Papua New Guinea ID044
- 14:30 PM** **Cang-song Chen**
Conservation biology of the critically endangered salamander (*Hynobius amjiensis*) in China ID552
- 14:45 PM** **Seshadri K. Shamanna**
Evolutionary ecology and conservation of Bamboo breeding frogs in the Western Ghats biodiversity hotspot ID307
- 15:00 PM** **Izabela M. Barata**
How much effort is needed to detect population changes in amphibians? A test using a bromeliad-inhabiting frog ID436
- 15:15 PM** **Boaz Shacham**
Monitoring endangered endemic lizards: survey of *Acanthodactylus beershebensis* (Lacertidae, Sauria) in the northern Negev ID471

MINGRUI ROOM

S6: Hybrid Zones as a Mechanism of Interspecific Gene Exchange: New Models and Empirical Tests

- Organizers** Ben Wielstra & Evan McCartney-Melstad
- 13:30 PM** **Ben Wielstra**
A genomic footprint of hybrid zone movement in crested newts ID192
- 13:45 PM** **Wieslaw Babik**
Balancing selection facilitates introgression of immune genes between the Carpathian and smooth newts ID326
- 14:00 PM** **Shohei Komaki**
Recurrent mtDNA introgression among *Pelophylax* frogs in East Asia driven by glacial cycling ID014
- 14:15 PM** **Ulrich Joger**
Hybrid speciation in Caucasian vipers ID615
- 14:30 PM** **Wei-zhao Yang**
Understanding the genomic signature of sexually selected introgression in common wall lizard (*Podarcis muralis*) ID403
- 14:45 PM** **Jared Grummer**
Identifying hybrid zones and species limits with genome-wide DNA in a promiscuous group of *Liolaemus* lizards ID062
- 15:00 PM** **Yi-chun Chang**
Asymmetrical introgression between two sibling treefrog species *Kurixalus eiffingeri* and *K. berylliniris* in Taiwan ID414
- 15:15 PM** **Carolyn Kindler**
How many species of grass snakes are out there? Phylogeography, gene flow across contact zones and taxonomy of *Natrix natrix* ID115

MINGDE & MINGSI ROOM

S25: From Canterbury to Hangzhou: Lessons Learned on the Threat of Emergent Infectious Diseases (EID's) to Herpetofauna

- Organizers** Frank Pasmans & Jean-Marc Hero
- 13:30 PM** **Molly C. Bletz**
Probiotic conservation strategies for Malagasy amphibians: predicting risk and selecting effective probiotics ID075
- 13:45 PM** **Joana Sabino-Pinto**
Composition of the skin microbial community in Japanese amphibians: effects of captivity, host species, and body region ID142
- 14:00 PM** **Emma K. Bales**
Do skin bacteria of German Fire Salamanders have potential inhibitory effects on chytrid fungi, particularly *Batrachochytrium salamandrivorans*? ID224
- 14:15 PM** **Ricky J. Spencer**
Profiling a disease that drove a species of turtle to functional extinction over a three week period in 2015 ID656
- 14:30 PM** **Bruce Waldman**
Evolution of resistance to amphibian chytridiomycosis and its possible life-history consequences ID191
- 14:45 PM** **Adria Rae Abigail R. Eda**
Isolation, screening and identification of frog cutaneous bacteria for anti-*Batrachochytrium dendrobatidis* activity ID012
- 15:00 PM** **Andrés Valenzuela-Sánchez**
Disease-induced extinction in an apparently stable host-parasite system: mark-recapture methods reveal population effects of chytrid infection in a terrestrial amphibian ID401
- 15:15 PM** **Gonçalo M. Rosa**
Host-pathogen persistence in a post-outbreak system ID198

FRIDAY 19TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 6 & 7

Ecology Ethology

Chair Mizuki Takahashi

13:30 PM Bruno O. Ferronato

Effects of urbanization and climate on the ecology and survivorship of the turtle *Chelodina longicollis*, southeastern Australia ID199

13:45 PM Martyn Drabik-Hamshare

Movement, home range and habitat use as a consequence of climatic variables in leopard tortoises (*Stigmochelys pardalis*) ID226

14:00 PM Jhan-wei Lin

Tail regeneration after autotomy increases survival under avian predation: a case from a grass lizard and their avian predators ID237

14:15 PM Eric J. Nordberg

The impact of livestock grazing on arboreal lizards and their predators ID254

14:30 PM Richard Vogt

Communication and Social Life of the Giant South American River Turtle (*Podocnemis expansa*) ID243

14:45 PM Riyad Sadek

Annual patterns of movement in the Lebanon Mountain Viper, *Montivipera bornmuelleri* (Werner, 1898) ID252

15:00 PM Simon Baeckens

Do environmental conditions shape the chemical signalling signature of lacertid lizards? ID255

15:15 PM Semenishcheva E.Yu

Analysis of biotopical distribution peculiarities of two lizard species of genus *Takydromus* inhabiting the north-eastern Asia (Far East of Russia, Republic of Korea) ID268

TIANHONG ROOM

Adaptation Evolution

Chair Wollenberg Valero

13:35 PM Ben Phillips (MINI-PLENARY SPEAKER)

Using local adaptation to mitigate the impact of climate change ID555

14:00 PM Robert E. del Carlo

Point-mutations in skeletal muscle voltage-gated sodium channels confer resistance to tetrodotoxin: but at a cost? ID061

14:15 PM Domenic C. D'Amore

Dental morphometrics in Western Australian monitor lizards: does dentition play a role in predator guild niche separation? ID074

14:30 PM Karin Brigit Holthaus

Comparative genomics suggests evolutionary adaptations of epidermal differentiation in squamates ID085

14:45 PM Arne Schulze

Hidden treasures –recovering data on tadpole diversity from museum collections for modern scientific research on landscape and evolutionary traits ID095

15:00 PM Jeremy Cohen

Outbreaks of the amphibian chytrid fungus *Batrachochytrium dendrobatidis* are controlled by host adaptations to climate ID117

15:15 PM Genevieve Diedericks

Enemy at the gates: rapid defensive trait diversification in an adaptive radiation of lizards ID143

FRIDAY 19TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 2

S11: Biodiversity and Monitoring of Amphibians and Reptiles

Organizers Jian-ping Jiang & John Measey

15:45 PM John Measey
Counting chirps: acoustic monitoring of cryptic frogs ID023

16:00 PM Boaz Shacham
Reptile monitoring within the scope of a national bio-monitoring scheme: Aims, methods and results from the first 4 years of 'Hamaarag' program ID473

16:15 PM Lea A. Randall
Seasonal and annual occupancy dynamics of an imperilled amphibian ID030

16:30 PM Tian Zhao
Similar contribution to taxonomic, but not functional and phylogenetic diversity reveals the ecological and evolutionary difference of amphibian species ID341

16:45 PM Abel A. Batista
Status of the herpetofauna from eastern Panama ID032

17:00 PM Cheng Li
The relationship between community structure of ground-dwelling vertebrates and habitat types in Wanglang Natural Reserve ID489

17:15 PM Sharon Renan
Using genetic monitoring to detect the Hula painted frog populations in the Hula Valley and testing the method efficiency for the monitoring of amphibians in Israel ID041

17:30 PM Li-xia Zhang
Why do the Chinese brown frogs keep pairing during hibernation? ID323

17:45 PM Jia-tang Li
Morphology and function of an enlarged bony knob on the third metacarpal in arboreal frogs of the *Rhacophorinae* (Rhacophoridae, Anura, Amphibia) ID452

MINGRUI ROOM

S6: Hybrid Zones as a Mechanism of Interspecific Gene Exchange: New Models and Empirical Tests

Organizers Ben Wielstra & Evan McCartney-Melstad

15:45 PM Yin Qi
Hybridization and mitochondrial genome introgression between *Rana chensinensis* and *R. kukunoris* ID304

16:00 PM Matthias Stöck
Differential introgression of sex-linked vs. autosomal markers in anuran hybrid zones in space and time ID279

16:15 PM Evan McCartney-Melstad
Using exon capture data to measure the tempo and extent of hybridization between an endangered amphibian and an introduced congener ID354

16:30 PM Kathryn Stewart
Can alternative mating tactics facilitate introgression across a hybrid zone? ID445

16:45 PM Discussion

MINGDE & MINGSI ROOM

S25: From Canterbury to Hangzhou: Lessons Learned on the Threat of Emergent Infectious Diseases (EID's) to Herpetofauna

Chair Frank Pasmans & Jean-Marc Hero

15:45 PM Annemarieke Spitzen-van der Sluijs
The long-term cost of chytridiomycosis for yellow-bellied toads ID165

16:00 PM Jean-Marc Hero
Stress, chytrid, habitat and thermal biology of the stony creek frog ID600

16:15 PM Pascale Van Rooij
Emerging fungal threats to European amphibians: implications for hygiene measures ID138

16:30 PM Gwij Stegen
The highly infectious, lethal and persistent fungal pathogen *Batrachochytrium salamandrivorans*: recipe for rapid disease driven extinction ID161

16:45 PM Matthew J. Gray
Susceptibility of North American amphibians to *Batrachochytrium salamandrivorans* ID108

17:00 PM Donal Smith
Can host population genetic structure predict susceptibility to chytridiomycosis in naïve populations? ID561

17:15 PM Jie Ma
Identification of Type I IFN in Chinese giant salamander (*Andrias davidianus*) and the response to an iridovirus infection ID641

17:30 PM Qi-wei Qin
Selection and characterization of novel DNA aptamers specific recognized aquatic vertebrate iridoviruses of Singapore grouper iridovirus (SGIV) and softshell turtle iridovirus (STIV) ID642

17:45 PM Santiago R. Ron
Retrospective surveys of the chytrid fungus *Batrachochytrium dendrobatidis* in Ecuador ID554

FRIDAY 19TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 6 & 7

Recovery Restoration

Chair Jim Foster

15:45 PM Yik-hei Sung

Conservation of the big-headed turtle
Platysternon megacephalum in Hong Kong
– where we are and the way forward ID338

16:00 PM Nurhartini-Kamalia Yahya

Awareness programme for green sea turtle
conservation in Sarawak ID370

16:15 PM Carla C. Eisemberg

Don't put all your eggs in one basket –
lessons from a thirty-year Amazon turtle
project ID486

16:30 PM Tom Kirschey

Can ecosystem restoration fulfill
herpetofaunal diversity requirements? The
example of Hutan Harapan in lowland
Sumatra (Indonesia) ID488

16:45 PM Sara L. Ashpole

Restoring a wetland complex for
amphibian populations, south Okanagan
Valley, British Columbia, Canada (2003 to
2014) ID535

17:00 PM Jim Foster

Reintroducing a nationally extinct
amphibian by wild-to-wild translocation:
assessing success after ten years ID335

17:15 PM Ji-chao Wang

Ecology of two endangered box turtle on
Hainan island: *Cuora galbinifrons* and *C.*
mouhotii ID653

TIANHONG ROOM

Adaptation Evolution

Chair Xuan Liu

15:45 PM Wei Zhang

Transcriptome analysis reveals the genetic
basis for the seasonal variation of
keratinized nuptial spines in
Leptobrachium boringii ID566

16:00 PM Cameron Hudson

Invading toads evolving rapidly: phenotypic
adaptations for dispersal in the cane toad
(*Rhinella marina*) ID546

16:15 PM Tein-shun Tsai

Factors affecting the number of
mechanoreceptors on the cephalic scales
of snakes ID497

16:30 PM Yuan-ting Jin

A mitogenomic analysis of the phylogeny
and adaptive evolution of Chinese toad-
headed lizards (Agamidae,
Phrynocephalus) ID482

16:45 PM Susan Schweiger

Evolution of terrestrial development in
anurans ID398

17:00 PM Roberto Márquez

Divergence, gene flow, and the evolution
of aposematic coloration in *Phylllobates*
poison frogs ID024

17:15 PM Andrea Narvaez

Color and motion structure of territorial
display by *Anolis chloris* differ between
populations: local adaptation to habitat
variation? ID162

SATURDAY 20TH AUGUST – PROGRAM AT A GLANCE

	JINGCHAO HALL	MINGDU ROOM 2	MINGRUI ROOM	MINGDE & MINGSI ROOM	MINGDU ROOM 6 & 7	TIANHONG ROOM
08:30 AM	CHAIR <u>Robert W. Murphy</u> Plenary Eight Selection and the Evolution of Warning Color Diversity in the Strawberry Poison Frog Corinne Richards-Zawacki					
09:15 AM	Plenary Nine What Determines Biogeographical Patterns of Amphibians and Reptiles: The Past, the Present and the Humans Francesco Ficetola					
10:00 AM	Coffee Break					
10:15 AM	<i>Symposium 8</i>	<i>Physiology</i>	<i>Symposium 7</i>	<i>Symposium 12</i>	<i>Ecology Ethology</i>	<i>Symposium 31</i>
12:15 PM	Lunch in Cafe Mediterranean					
13:30 PM		<i>Symposium 11</i>	<i>Symposium 5</i>	<i>Symposium 12</i>	<i>Symposium 4</i>	<i>Adaptation Evolution</i>
15:30 PM	Coffee Break					
15:45 PM		<i>Symposium 11</i>	<i>Symposium 5</i>	<i>Symposium 12</i>	<i>Symposium 4</i>	<i>Symposium 1</i>
17:00 PM	WCH Exec & IHC meetings in Minghou Room					
18:00 PM	Closing Banquet in Kaiyuan Hall					

SATURDAY 20TH AUGUST – PROGRAM IN DETAILS

JINGCHAO HALL

S8: Omic Technologies for Investigating Venom Evolution

- Organizers** Juan J. Calvete & Jian-fang Gao
- 10:15 AM** Juan J. Calvete
Insights into the evolution of a snake venom multigene family from the genomic organization of *Echis ocellatus* SVMP genes **ID260**
- 10:30 AM** Manjunatha Kini
Regulation of expression of venom toxins: role of AG-rich motifs **ID231**
- 10:45 AM** Daniel Petras
Top-down mass spectrometry paves the way for a proteoform resolved high-throughput analysis of snake venoms **ID263**
- 11:00 AM** Choo Hock Tan
The plastic cobras: omics investigation of venom evolveability and allopatric variation **ID163**
- 11:15 AM** Bruno Lomonte
Proteomic studies on *Micrurus* venoms reveal two divergent toxin expression phenotypes **ID193**
- 11:30 AM** Christopher Parkinson
Venom evolution in pitvipers: A comparative phylogenetic and transcriptomics approach **ID432**
- 11:45 AM** Inn-ho Tsai
How the sequences of venom phospholipases and serine proteases tell us about pitviper evolution: *Azemiops* venomomics as an example **ID492**
- 12:00 AM** Jian-fang Gao
Combined venomomics, antivenomics and venom gland transcriptome analysis of the monocled cobra, *Naja kaouthia*, from China **ID622**
- 12:15 PM** Rebecca D. Tarvin
Evolution of epibatidine resistance in poison frogs **ID604**

MINGDU ROOM 2

Physiology

- Chair** David Booth
- 10:15 AM** Qiang Chen
The cold hardiness of the *Phrynocephalus erythrurus*, the highest altitude lizard in the world **ID347**
- 10:30 AM** Nicholas C. Wu
Cutaneous ion transport during sloughing in amphibians **ID206**
- 10:45 AM** Cui-juan Niu
Antioxidant defense response to acute thermal change stress in Chinese soft-shelled turtle *Pelodiscus sinensis* **ID276**
- 11:00 AM** Wen-hsuan Tseneg
Nuptial color evolution driven by female preference and spectral sensitivity in sexually dichromatic *Takydromus viridipunctatus* **ID396**
- 11:15 AM** Ye-zhong Tang
Vocal communication in geckos: from behavior to neurophysiology **ID446**
- 11:30 AM** Mahmood Sasa
Reproductive phenology and secondary productivity in a tropical dry forest anuran assemblage in Costa Rica **ID450**
- 11:45 AM** Zhi-gang Xie
Dose hibernating Asiatic toad (*Bufo Bufo gargarigans*) turn off circadian clock in brain but not in peripheral organs? **ID568**
- 12:00 AM** Tahar Slimani
Thermal ecology of Atlas lizard (*Atlantolacerta andreanskyi*) in the Oukaïmeden Massif (Central High Atlas - Morocco) **ID160**
- 12:15 PM** Qiu-sheng Chen
Long-term sperm storage in Chinese soft-shelled turtle, *Pelodiscus sinensis* **ID288**

MINGRUI ROOM

S7: Recent Advances in the Evolution of Chemical Defenses in Natricine Snakes

- Organizers** Alan H. Savitzky & Akira Mori
- 10:15 AM** Peng Guo
Natricinae: phylogeny, taxonomy, and biogeography **ID602**
- 10:30 AM** Ulrich Joger
Phylogeny and phylogeography of the genus *Natrix* **ID408**
- 10:45 AM** Akira Mori
Nuchal gland system: a novel defensive mechanism evolved in Asian natricine snakes **ID451**
- 11:00 AM** Yosuke Kojima
Active foraging for toads by gravid females of *Rhabdophis tigrinus* **ID383**
- 11:15 AM** Alan H. Savitzky
Vascular morphology of the nuchal glands and physiological correlates of chemical defense in *Rhabdophis* **ID456**
- 11:30 AM** Hirohiko Takeuchi
Evolution of a special organ, nuchal gland, based on a molecular phylogeny of the Eurasian natricine snakes (Serpentes: Colubridae) **ID468**
- 11:45 AM** Tatsuya Yoshida
Chemical analysis of bufadienolides in defensive glands of Asian *Rhabdophis* snakes **ID447**
- 12:00 AM** Gordon M. Burghardt
Beyond instinct: the application of behavior systems theory to natricine snake foraging and anti-predator behavior **ID251**

SATURDAY 20TH AUGUST – PROGRAM IN DETAILS

MINGDE & MINGSI ROOM

S12: Refining Priorities for Global Amphibian Conservation

Organizers Phil Bishop & Sally Wren

10:14 AM Phil Bishop
Introduction

10:15 AM Jessica Hua
Ecotoxicology: Integrating evolution and art to address priority actions identified in the new Amphibian Conservation Action Plan ID500

10:30 PM Johannes Penner
The proposal of the Climate Change Working Group of the IUCN amphibian specialist group for the upcoming three years ID078

10:45 AM Molly C. Bletz
ACAP infectious disease priorities: filling knowledge gaps, fostering integrative mitigation strategies, and facilitating effective communication and engagement ID328

11:00 AM Sally Wren
A SWOT analysis of global amphibian conservation expertise ID293

11:15 AM Richard Mollard
Culture, cryopreservation and recovery of viable and karyotypically normal Australian native amphibian cells ID244

11:30 AM David Bickford
An overview and update of commercial trade of amphibians for the ACAP ID367

11:45 AM Carolin Dittrich
Stable isotope analyses – a method to differentiate between farmed and collected frog legs ID080

12:00 AM Benjamin Tapley
An update from the ASG captive breeding working group ID141

MINGDU ROOM 6 & 7

Ecology Ethology

Chair John Dale Roberts

10:15 AM Taran Grant (MINI-PLenary SPEAKER)
Alkaloid diversity in red-belly toads (*Melanophryniscus*: Bufonidae), the “other” poison frogs ID657

10:40 AM Nicola Nelson
Uncertain future for old reptiles: estimates of tuatara longevity and implications for conservation management ID289

10:55 AM Wei Zhang
The effects of urbanization on anuran communities in Shanghai, China ID310

11:10 AM Noelikanto Ramamonjisoa
Differential effects of tadpoles on nutrient cycling and leaf litter decomposition in a tropical stream in Madagascar ID371

11:25 AM Ya-yong Wu
The fitness benefits of female-female aggression in an agamid lizard *Phrynocephalus vlangalii* ID400

11:40 AM Nikolay A. Poyarkov
MtDNA differentiation of Central Asian racerunners and taxonomic problems in the *Eremias multiocellata* – *E. przewalskii* species complex (Reptilia, Squamata, Lacertidae) ID421

11:55 AM Johana Goyes-Vallejos
Female calling behavior and possible sex-role reversal in the vocal repertoire of the smooth guardian frog *Limnonectes palavanensis* (Anura: Dicroglossidae) of Borneo ID434

12:10 AM Sengvilay Seateun
Population ecology of the Black-bellied Leaf Turtle (*Cyclemys oldhamii*) in Sakaerat Biosphere Reserve, Nakhon Ratchasima Province, Thailand ID467

TIANHONG ROOM

S31: Evolution in Time and Space: Total-evidence Approaches to Biogeographic and Phylogenetic Questions

Organizers Ke-qin Gao & Hong-yu Yi

10:15 AM Jason Anderson
Endocranial anatomy from micro-CT provides new evidence for amphibian evolution ID635

10:30 AM David Cannatella
Fossils, morphology, genomics, and the tree of pipid frogs. Another look ID241

10:45 AM Jian-ye Chen
Inferring evolutionary relationships and biogeographic history with combined information of fossils, morphology and molecules: a case study on spadefoot toads (Anura: Pelobatoidea) ID460

11:00 AM Ke-qin Gao
Patterns of phylogeny and biogeographic origins of urodele clades: how fossil discoveries change our understanding of clade evolution of salamanders ID387

11:15 AM Jia Jia
Evolutionary conservativeness of developmental patterns in urodeles: Evidence from *Mesozoic salamanders* of China ID388

11:30 AM Michel Laurin
Gigantic study and surprising results (for some) about stegocephalian phylogeny and lissamphibian origins ID088

11:45 AM Utpal Smart
Miocene slitherings on the shores of Donghai: systematics and biogeography of *Sinomicrurus* coral snakes ID205

12:00 AM Yuan Wang
A new pelobatoid frogs from the early Eocene of southern China and its implication on the early evolutionary history of Pelobatoidea ID285

12:15 PM Hong-yu Yi
Total evidence phylogeny of iguanian lizards: phylogenetic and biogeographic significance of the Late Cretaceous fauna ID532

12:30 PM Darrel Frost

SATURDAY 20TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 2

S11: Biodiversity and Monitoring of Amphibians and Reptiles

- Organizers** Jian-ping Jiang & John Measey
- 13:25 PM** Masafumi Matsui
Recent progress in amphibian diversity studies in Japan ID324
- 13:45 PM** Jing Che
Amphibia China: an online database of Chinese amphibians ID494
- 14:00 PM** Ahmed M. Alshammari
Amphibians and reptiles of the Ha'il province, Saudi Arabia, with new additional records ID022
- 14:15 PM** Yan Huang
Character evolution in spiny frogs (subfamily Painae) ID525
- 14:30 PM** Robert Ward
Counting cryptics: applying occupancy and binomial mixture models to snake populations ID246
- 14:45 PM** Natsuhiko Yoshikawa
Cryptic species diversity in the clawed salamanders of the genus *Onychodactylus* revealed by recent molecular and morphological analyses ID617
- 15:00 PM** Mona van Schingen
Does the Crocodile lizard from Vietnam represent a separate conservation unit? Linking ecological analyses with new molecular and morphological data ID236
- 15:15 PM** Katharina C. Wollenberg Valero
Uncoupled evolution of life cycle phases in frogs ID036

MINGRUI ROOM

S5: Amphibian and Reptilian Genomics: Recent Success, Current Progress, and Future Challenges

- Organizers** Guo-jie Zhang & Robert W. Murphy & Jing Che & Andrew J. Crawford
- 13:30 PM** Guo-jie Zhang
Introduction
- 13:45 PM** Alexander S. Hall
Mitochondrial genomes as tools for systematics ID437
- 14:00 PM** Jia-yong Zhang
Complete mitochondrial genomes of *Nanorana taihangnica* and *N. yunnanensis* (Anura: Dicoglossidae) with high diversity of mitochondrial gene arrangements and phylogenetic relationship of Dicoglossidae ID090
- 14:15 PM** Andrew J. Crawford
Adaptive molecular evolution of resistance to toad toxins in toads and their vertebrate predators ID463
- 14:30 PM** Yong Shao
Transcriptomes reveal the genetic mechanisms underlying ionic regulatory adaptations to salt in the crab-eating frog ID502
- 14:45 PM** Hong Jin
Molecular convergent and parallel evolution among high-altitude amphibians ID322
- 15:00 PM** Katharina C. Wollenberg Valero
Three fold convergent genomic climate adaptation relays convergent phenotypic evolution in *Anolis* ID178
- 15:15 PM** Kenro Kusumi
The evolution of regeneration in reptiles and amphibians: insights from comparative genomic analysis of gene regulatory networks ID228

MINGDE & MINGSI ROOM

S12: Asian Regional Priorities, Challenges and Opportunities for Amphibian Conservation

- Organizers** Phil Bishop & Sally Wren
- 13:30 PM** Richard. A. Griffiths
Captive breeding and reintroduction of amphibians – How far have we come since the Amphibian Conservation Action Plan? ID391
- 13:45 PM** Helen Meredith
Developing species conservation strategies to improve the impact of amphibian conservation ID333
- 14:00 PM** Jim Foster
Do action plans deliver real outcomes? Global and local influences on conservation planning for UK amphibians ID334
- 14:15 PM** Marcileida Dos Santos
Communication and education priorities in global amphibian conservation ID364
- 14:30 PM** Phil Bishop
Refining priorities for global amphibian conservation ID545
- 14:43 PM** Phil Bishop
Two-min introduction of session 2
- 14:45 PM** Wen-hao Chou
Frog conservation in Taiwan ID114
- 15:00 PM** Jian-ping Jiang
Assessing the threaten status of amphibians in China ID443
- 15:15 PM** Wun-bin Gong
Using species distribution model to identify biodiversity hotspots for frogs of Taiwan ID309

SATURDAY 20TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 6 & 7

S4: Species Delimitation in the Age of Phylogenomics

Organizers Jin-zhong Fu & Hinrich Kaiser

- 13:30 PM** **Tao Pan**
The challenge of species delimitation in narrowly distributed species in East Asia: diversification without morphological change in a sky island stream salamander, *Pachyhynobius shangchengensis* (Hynobiidae, *Pachyhynobius*) **ID366**
- 13:45 PM** **Peng Zhang**
Enlarged multilocus data set provides a new perspective on the frog tree of life **ID344**
- 14:00 PM** **Madhava Meegaskumbura**
Multiple criteria for systematics and beyond **ID355**
- 14:15 PM** **João F. R. Tonini**
Testing species delimitation models using genomic data and Bayes factor to uncover cryptic diversity of Neotropical microhylid **ID316**
- 14:30 PM** **Misbahul Munir**
Phylogenetic relationship of frogs in the genus *Megophrys* Kuhl and van Hasselt, 1822 (Anura, Megophryidae) from Sumatra and Borneo **ID337**
- 14:45 PM** **Guan-nan Wen**
Is the green odorous frog (*Odorrana margaretae*) a young ring species? **ID382**
- 15:00 PM** **Zhuo Chen**
Phylogeographic patterns of the *Odorrana livida* species complex (Anura: Ranidae) and its relationship to the geological events and drainage systems **ID384**
- 15:15 PM** **Yan-jun Zhu**
Genetic differentiation of *Odorrana schmachkeri* species complex **ID558**

TIANHONG ROOM

Adaptation Evolution

- Chair** Sara L. Ashpole
- 13:30 PM** **Xiao-xiao Zheng**
Comparing the patterns of multiple paternity in snakes from two different habitat types **ID164**
- 13:45 PM** **Konrad Mebert**
Home for three: microhabitat partition and body size differences among sympatric montane vipers *Vipera ammodytes*, *V. aspis*, and *V. berus* **ID181**
- 14:00 PM** **Hiral Naik**
The evolution of diet in the Lamprophiidae **ID258**
- 14:15 PM** **Chun-kai Yang**
Frogs numbers affect Taiwan Bamboo Viper (*Trimeresurus stejnegeri*) foraging location **ID278**
- 14:30 PM** **Stephen Reynolds**
Ten years in the top end: seasonal responses of anurans in monsoonal northern Australia **ID286**
- 14:45 PM** **Zhen-hua Luo**
Male-male competition drives sexual selection and group spawning in the Omei treefrog, *Rhacophorus omeimontis* **ID296**
- 15:00 PM** **Yun Xia**
The origin and evolution of chromosomal reciprocal translocation: a case study of translocation polymorphisms in *Quasipaa boulengeri* (Anura, Dicroglossidae) **ID297**
- 15:15 PM** **Damien Esquerre**
Adaptive and allometric effects on the evolution of python phenotypes **ID314**

SATURDAY 20TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 2

S11: Biodiversity and Monitoring of Amphibians and Reptiles

- Organizers** Jian-ping Jiang & John Measey
15:45 PM Bin Wang
 Diversification dynamics of the montane toad genus *Oreolalax* (Amphibia, Anura, Megophryidae): strolling radiation around the Sichuan Basin **ID381**
- 16:00 PM** André Jankowski
 Shift in amphibian species composition along a forest disturbance gradient in Sumatra, Indonesia **ID240**
- 16:15 PM** Janak Raj Khatiwada
 Species richness, species abundance and assembly patterns of amphibian communities along an elevational gradient in eastern Nepal Himalaya **ID351**
- 16:30 PM** Sarig Gafny
 The return of a living fossil: resolving the natural history secrets of the rediscovered Hula painted frog *Latonia nigriventer* **ID128**
- 16:45 PM** Zu-yao Liu
 Tectonic movements and glacial isolation result in high species diversity and microendemism of *Megophrys* toads in southeastern China **ID298**
- 17:00 PM** Bálint Halpern
 Egg predation of European pond turtle (*Emys orbicularis*) in Ipoly-valley, Hungary **ID538**
- 17:15 PM** Jelger Herder
 The use of environmental DNA (meta) barcoding to monitor amphibians **ID394**
- 17:30 PM** Kai Wang
 Underestimated diversity: a taxonomic review of the *Japalura flaviceps* complex (Sauria: Agamidae: Draconinae) in Southwest China **ID282**

MINGRUI ROOM

S5: Amphibian and Reptilian Genomics: Recent Success, Current Progress, and Future Challenges

- Organizers** Guo-jie Zhang & Robert W. Murphy & Jing Che & Andrew J. Crawford
- 15:45 PM** Tony Gamble
 Sex chromosome evolution and the importance of squamate genomes **ID148**
- 16:00 PM** John H. Malone
 Identification of sex-linked sequences in the African bull frog (*Pyxicephalus adspersus*) **ID349**
- 16:15 PM** Rachel Lockridge Mueller
 Why do salamanders have such big genomes? **ID216**
- 16:30 PM** Yan-bo Sun
 Whole-genome sequence of the Tibetan frog *Nanorana parkeri* and the comparative evolution of tetrapod genomes **ID342**
- 16:45 PM** Daniel Jeffries
 Using the whole genome sequence of the European common frog to understand sex chromosome evolution in frogs **ID625**
- 17:00 PM** Arthur Georges
 Genome of the dragon and the genomics of sex **ID101**
- 17:15 PM** Evan McCartney-Melstad
 Complete genome sequences predict the impacts of alternative energy development scenarios on the endangered Mojave desert tortoise (*Gopherus agassizii*) **ID359**
- 17:30 PM** Rasmus Nielsen
 The genome of *Oophaga pumilio* **ID505**

MINGDE & MINGSI ROOM

S12: Asian Regional Priorities, Challenges and Opportunities for Amphibian Conservation

- Organizers** Phil Bishop & Sally Wren
- 15:45 PM** Kevin Messenger
 Identification of priority amphibian and reptile conservation areas in Southeastern China **ID481**
- 16:00 PM** Aravind Anantharam-Neelavar
 Challenges and opportunities for conservation of amphibians of India **ID352**
- 16:15 PM** Kotambylu Vasudeva Gururaja
 Amphibian assessments through citizen science initiatives in India: a case study from the western Ghats **ID479**
- 16:30 PM** Madhava Meegaskumbura
 Knowledge generation is a priority for Sri Lanka **ID476**
- 16:45 PM** Marites B. Sanguila
 Amphibian conservation in Mindanao, Southern Philippines **ID603**
- 17:00 PM** Indraneil Das
 Citizen science and public awareness programme in action. The Bornean frog race **ID559**
- 17:15 PM** Phil Bishop
 Summary remarks

SATURDAY 20TH AUGUST – PROGRAM IN DETAILS

MINGDU ROOM 6 & 7

S4: Species Delimitation in the Age of Phylogenomics

- Organizers** Jin-zhong Fu & Hinrich Kaiser
- 15:45 PM** Itzue W. Caviedes-Solis
Leap frogging the Mexican Highlands: diversification of the *Plectrohyla bistincta* species complex (Anura: Hylidae) **ID119**
- 16:00 PM** Umilaela Arifin
The surprising discovery of gastromyzophorous tadpoles in a taxonomically unstable ranid from Sumatra, Indonesia **ID223**
- 16:15 PM** Santiago J. Sánchez-Pacheco
Phylogeny of the lizard genus *Riama* (Squamata: Gymnophthalmidae): new generic arrangement, and the origin of the Sierra Nevada de Santa Marta endemic fauna **ID424**
- 16:30 PM** Hinrich Kaiser
Whither *Stegonotus*? Resolving the taxonomic and biogeographic conundrum of the common Australo-Papuan ground snakes **ID425**
- 16:45 PM** Hollis Dahn
Cryptic divergence and secondary contact: comparative phylogeography of *Rhinocheilus lecontei* and *Arizona elegans* in North America's desert regions **ID435**
- 17:00 PM** Mahmood Sasa
Phylogeography of the Central American Lancehead *Bothrops asper* (Serpentes: Viperidae) **ID453**
- 17:15 PM** Li-fang Peng
Species delimitation in *Gloydius* (Serpentes, Viperidae) using genome-scale data, effects of more genes and more individuals **ID397**
- 17:30 PM** Discussion

TIANHONG ROOM

S1: Phylogeography of Turtles and Tortoises

- Organizers** Melita Vamberger & Uwe Fritz
- 15:45 PM** Eva Graciá
Phylogeography of the spur-thighed tortoise *Testudo graeca*: understanding old and recent differentiation processes to predict the evolutionary consequences of climate change **ID038**
- 16:00 PM** Flora Ihlow
Integrative taxonomy of Southeast Asian snail-eating turtles (Geoemydidae: Malayemys) reveals a new species and mitochondrial introgression **ID102**
- 16:15 PM** Arthur Georges
Phylogeography of the enigmatic southern *Emydura* complex of eastern Australia (Chelonia: Chelidae) based on a combination of mitochondrial and nuclear DNA markers (SNPs) **ID083**
- 16:30 PM** Carolin Kindler
Molecular phylogeny of African hinge-back tortoises (*Kinixys*): implications for phylogeography and taxonomy **ID606**
- 16:45 PM** Căcilia Spitzweg
Conservation genetics of the northern river terrapin (*Batagur baska*) breeding project **ID073**
- 17:00 PM** Daniel Gaillard
A house divided: phylogeography of *Mauremys mutica* and its phylogenetic relationship with *M. annamensis* **ID654**
- 17:15 PM** Uwe Fritz
A review of recent advances in the phylogeography and population genetics of turtles **ID605**
- 17:30 PM** Melita Vamberger
Summary remarks

Exhibitor Information



Hangzhou Liquan Technology Co., Ltd. specializes in the design, integration, construction and maintenance of artificial climate rooms or chambers for a variety of animals and plants. Our customs are mainly from universities and academic institutions. We are making efforts to create an internationally leading control system.



Zhejiang Qiushi Artificial Environment Co., Ltd. specializes in the design, manufacture and installation of chambers and rooms for biological and agricultural studies. All products are custom-made to suit your particular conditions. We maintain a comprehensive portfolio of products including animal laboratory, clean room, biological culture chamber.



Zhejiang Dingyi Biotechnology Co., Ltd. (www.zjdysw.cn) specializes in the production of mealworms (*Tenebrio molitor*), and in import and export business of related products. Mealworms are rich in protein, free amino acids, fat- and water-soluble vitamins, and minerals. They are a source of food not only for pet animals but also for economically valuable animals.



EcoTech Ltd. specializes in providing and designing instrumentation and solutions used in biological, ecological and environmental studies. We also provide services of experimenting, research cooperation and training. We are distributors or representatives of many world reputable instrument manufactures in USA, Germany, Czech, Italy, and in UK.



Analytik Jena is an innovative provider of products in life science and analytical technology, including nucleic acid isolation, high-throughput liquid handling system, electrophoresis system, PCR and real-time PCR instruments, digital and in vivo imaging systems, molecular diagnostic kits, on-site molecular diagnostics system and general lab equipments.



Holohil Systems Ltd. (www.holohil.com) is a Canadian producer of VHF transmitters as small as 0.22g. Our units are suitable for a wide range of herps from small lizards and turtles to large snakes and tortoises. We specialize in long lived (1 to 5 years) hermetically sealed transmitters for implantation in snakes or attachment to aquatic fresh water turtles. All our transmitters are custom designed to the meet the requirements of the subject animal and the research project.



Wildlife Acoustics Inc. is a privately held United States company based in Concord, Massachusetts. The company provides bioacoustics monitoring technology for scientists, researchers, and government agencies internationally.

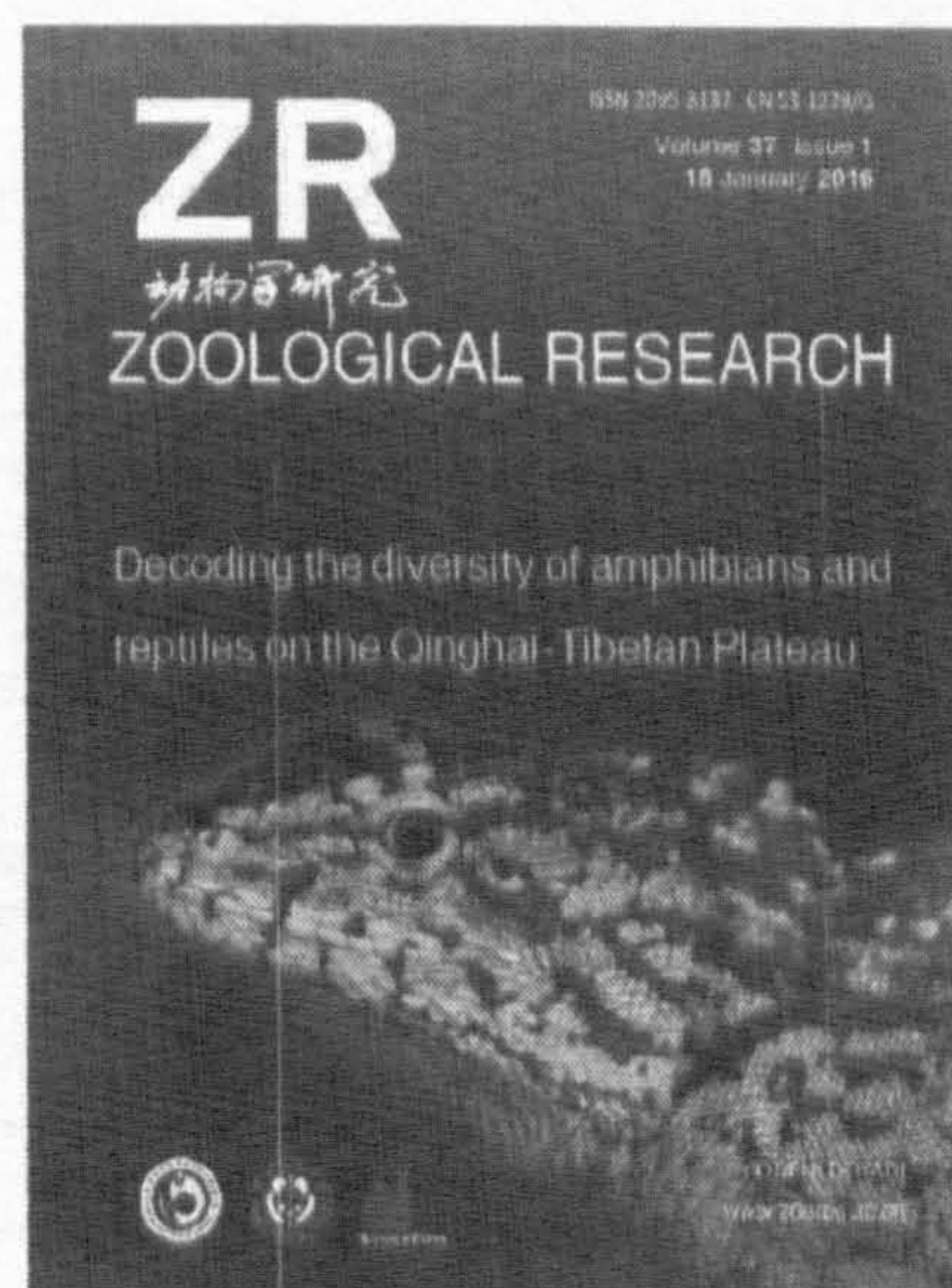
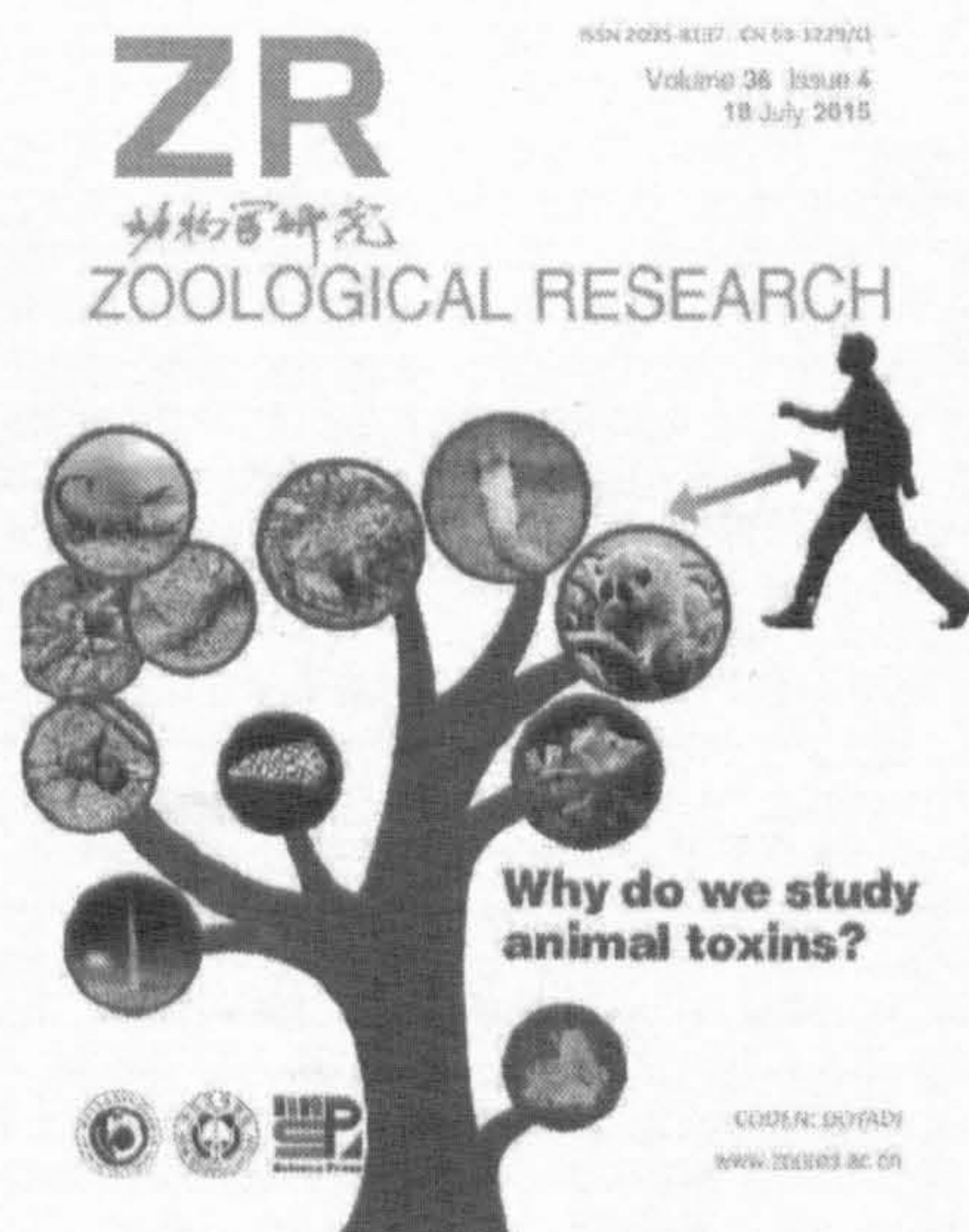
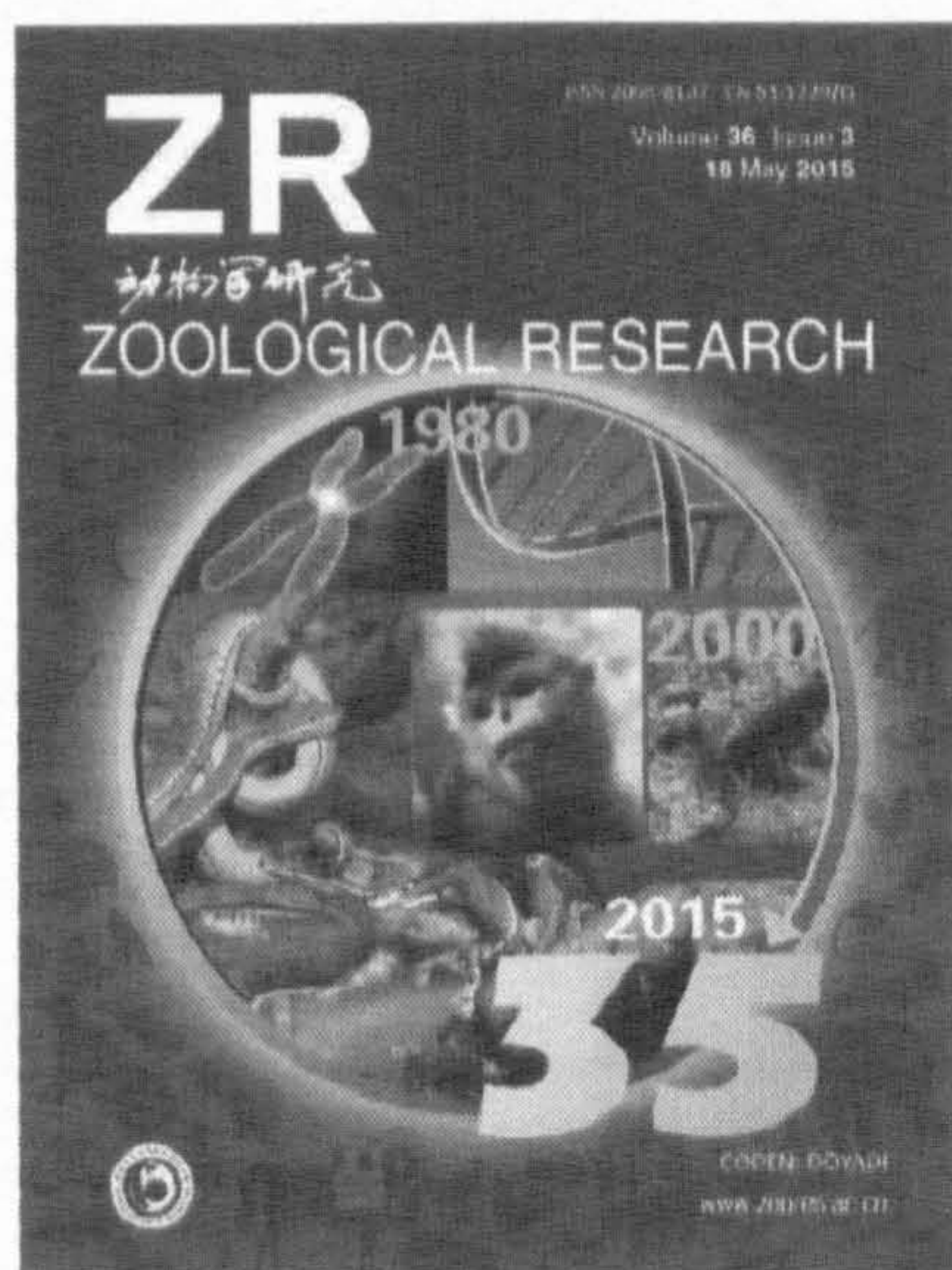
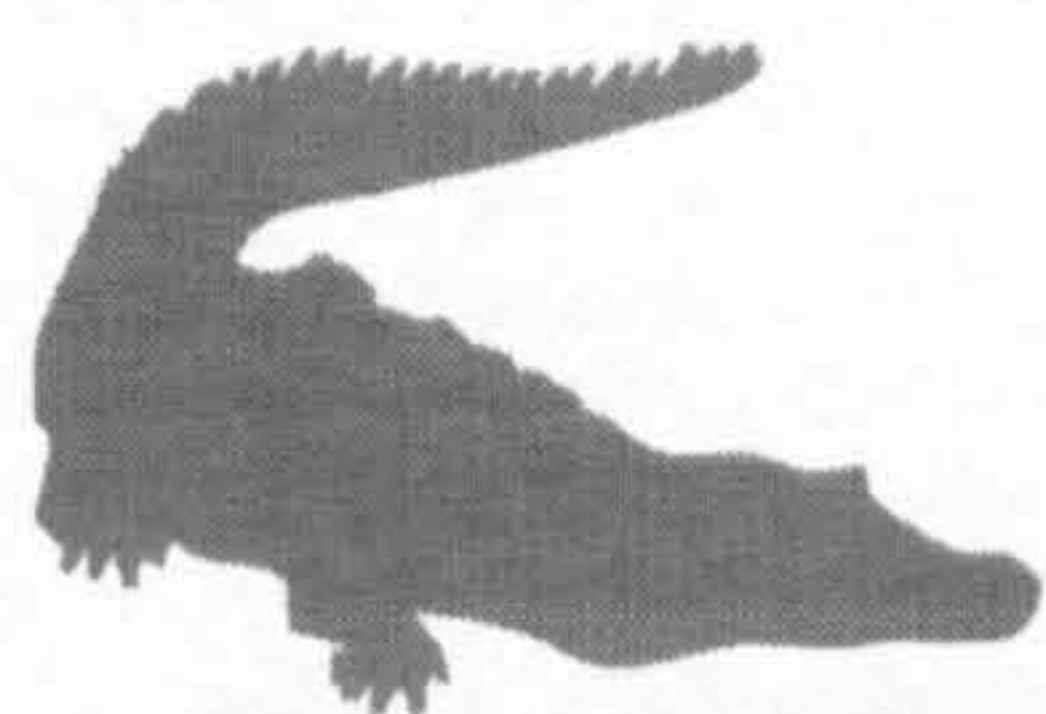


Shandong Xubang Artificial Environment Technology Co., Ltd. specializes in designing, producing and installing intelligent artificial climate chamber. Our products are used in various fields, including life and environmental sciences, genetic engineering, agriculture, forestry, animal husbandry, and textile, paper, tobacco, machinery, electronic and pharmaceutical industries.

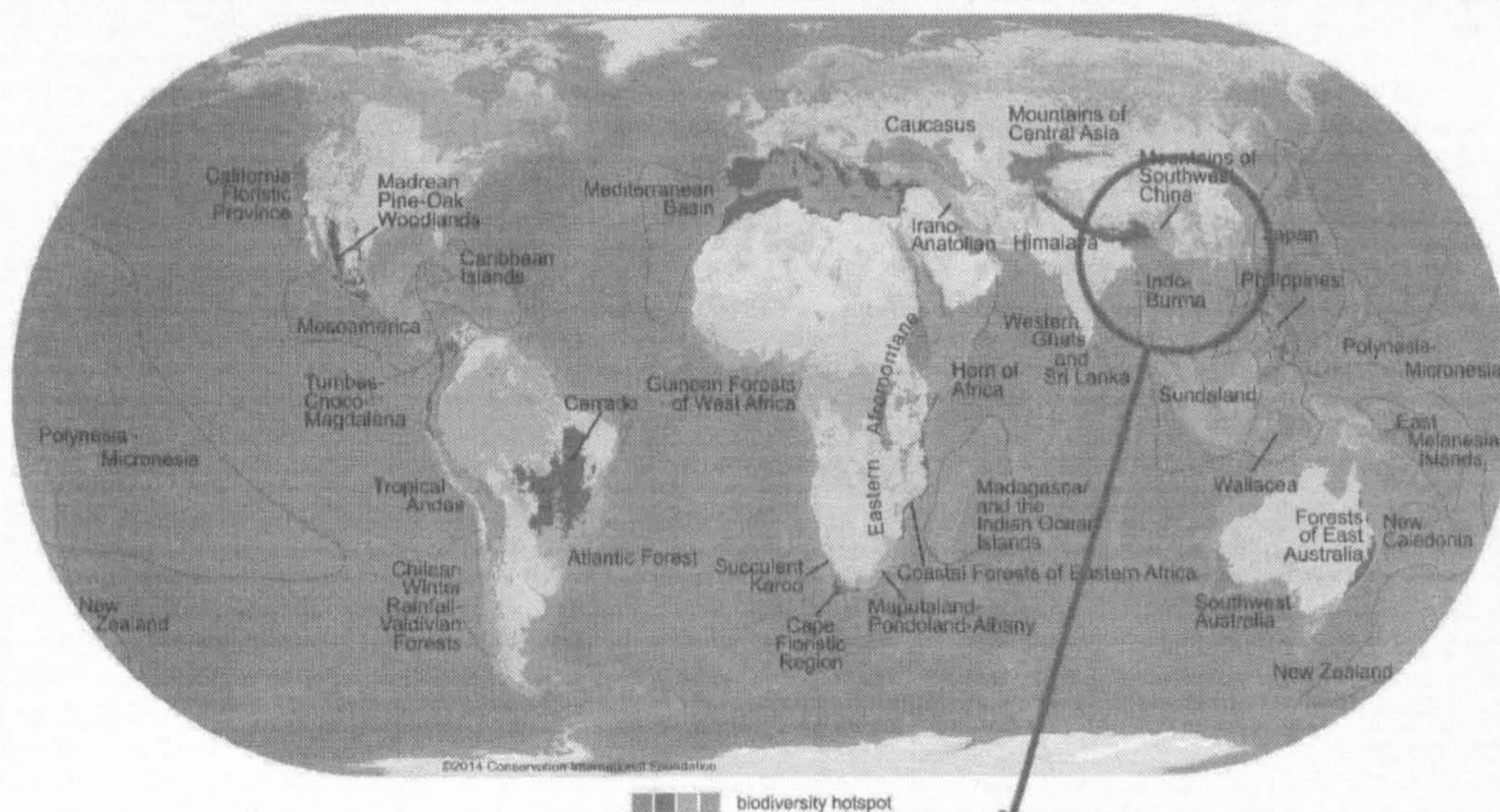
ZR

动物学研究

Overview: Established in 1980, *Zoological Research (ZR)* (CN: 53-1229/Q; ISSN: 2095-8137) is a bimonthly publication produced by *Kunming Institute of Zoology, the Chinese Academy of Sciences (KIZ)*, and the *China Zoological Society*. ZR is one of the best core zoology periodicals in China, was selected as one of the “Top 100 Journals and newspapers of China in 2015” and one of the “Outstanding S&T journals” in 2008 and 2014. ZR has continually been reported by many influential national and international indexes including, but not limited to: PubMed/MEDLINE, Ulrich's International Periodicals Directory, Biological Abstracts, Zoological Records, Chemical Abstracts, Abstract of Entomology, Chinese Science Citation Database, Bioline International. It has been subscribed to 11 countries other than China, such as, US, UK, Canada, and Australia. Moreover, the journal has been exchanged globally with other corresponding publications from 75 institutions in 23 countries and districts.



Scope and Aims: ZR publishes peer-reviewed original research article/review/report/note/letter to the editor/editorial in English on Genome Evolution and Genetic Diversity, Animal Ecology and Ethology, Primates and Animal Models of Human Diseases. We will try to do our better job to facilitate your publication and we do appreciate your support! For more information, please visit ZR's homepage: www.zoores.ac.cn.

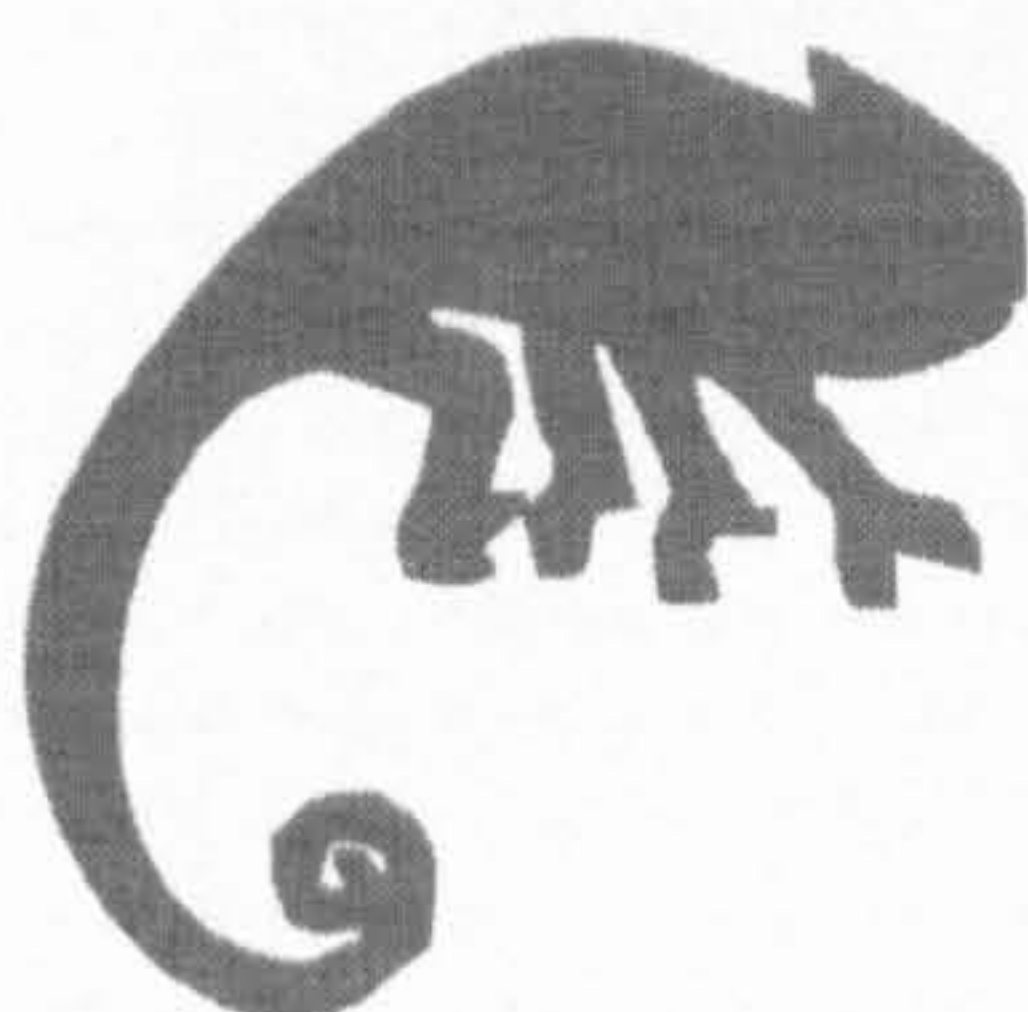


Southwest China; Southeast Asia

Located near the Indo-Burma biodiversity hotspot, the Kunming Institute of Zoology (KIZ) serves as a center for research on diverse biological resources of southwestern China, the Eastern Himalayas, and Southeast Asia.

Submission: To submit, please use the ScholarOne online submission system at: <https://mc03.manuscriptcentral.com/zr>.

Contact: Kunming Institute of Zoology, Chinese Academy of Sciences
32 Jiaochang Donglu, Kunming, Yunnan, China 650223

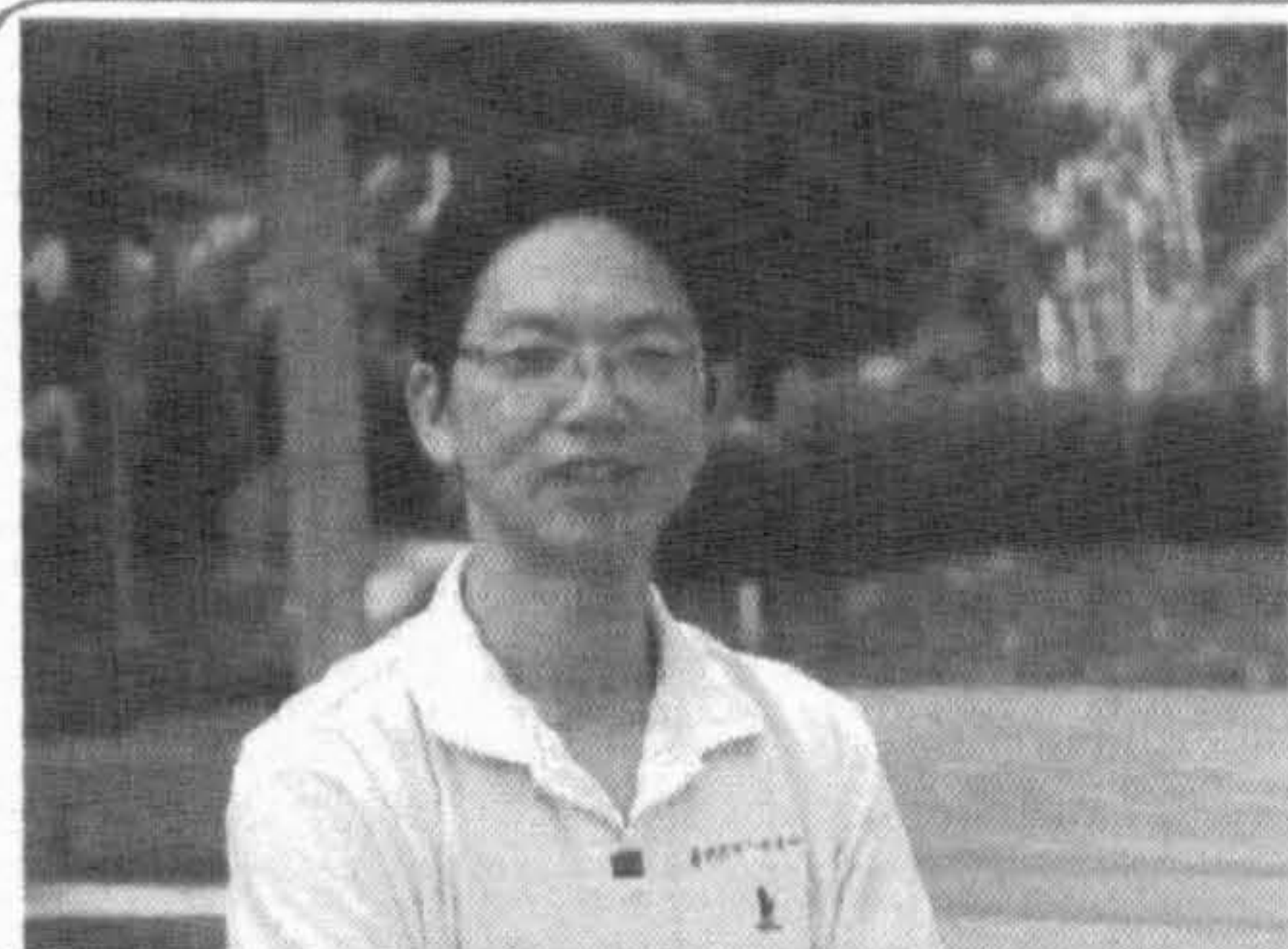


Tel: 86-871-65199026

E-mail: zoores@mail.kiz.ac.cn

Choose ZR to Maximize the Possibilities of Your Submissions!

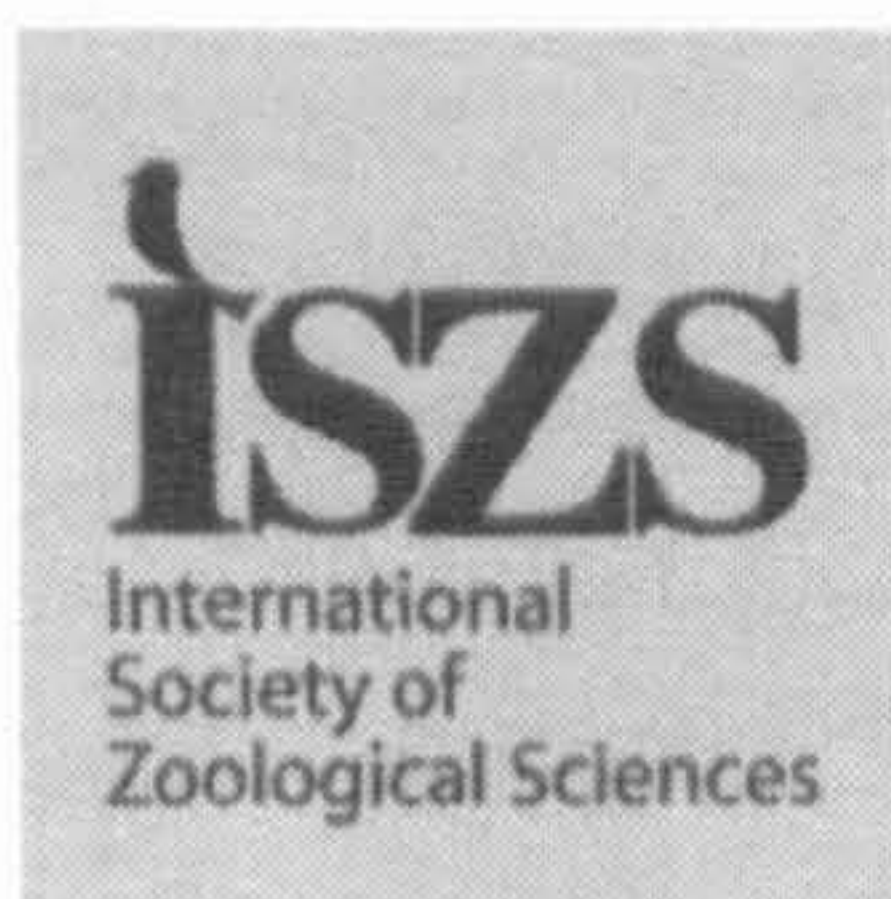
- (1) Excellent editorial group;
- (2) International peer-review team;
- (3) Full open access;
- (4) Fast decision and rapid publication;
- (5) Increasing international influence;
- (6) Free profession English editing;
- (7) Wechat compain to promote submission's visibility;



Editor-in-Chief: Dr. Yong-Gang YAO

NOTES

INTEGRATIVE ZOOLOGY



Overview

Published in partnership with the International Society of Zoological Sciences, Integrative Zoology is a new multidisciplinary journal aiming to encompass the varying perspectives and scholarly disciplines that contribute to the understanding of Zoological phenomena.



Aims and Scope

Integrative Zoology focuses on zoology as an integrative discipline encompassing all aspects of animal life. It presents a broader perspective of many levels of zoological inquiry, both spatial and temporal, and encourages cooperation between zoology and other disciplines including, but not limited to, physics, computer science, social science, ethics, teaching, paleontology, molecular biology, physiology, behavior, ecology and the built environment. It also looks at the animal-human interaction through exploring animal-plant interactions, microbe/pathogen effects and global changes on the environment and human society.



Author guidelines

[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1749-4877](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1749-4877)

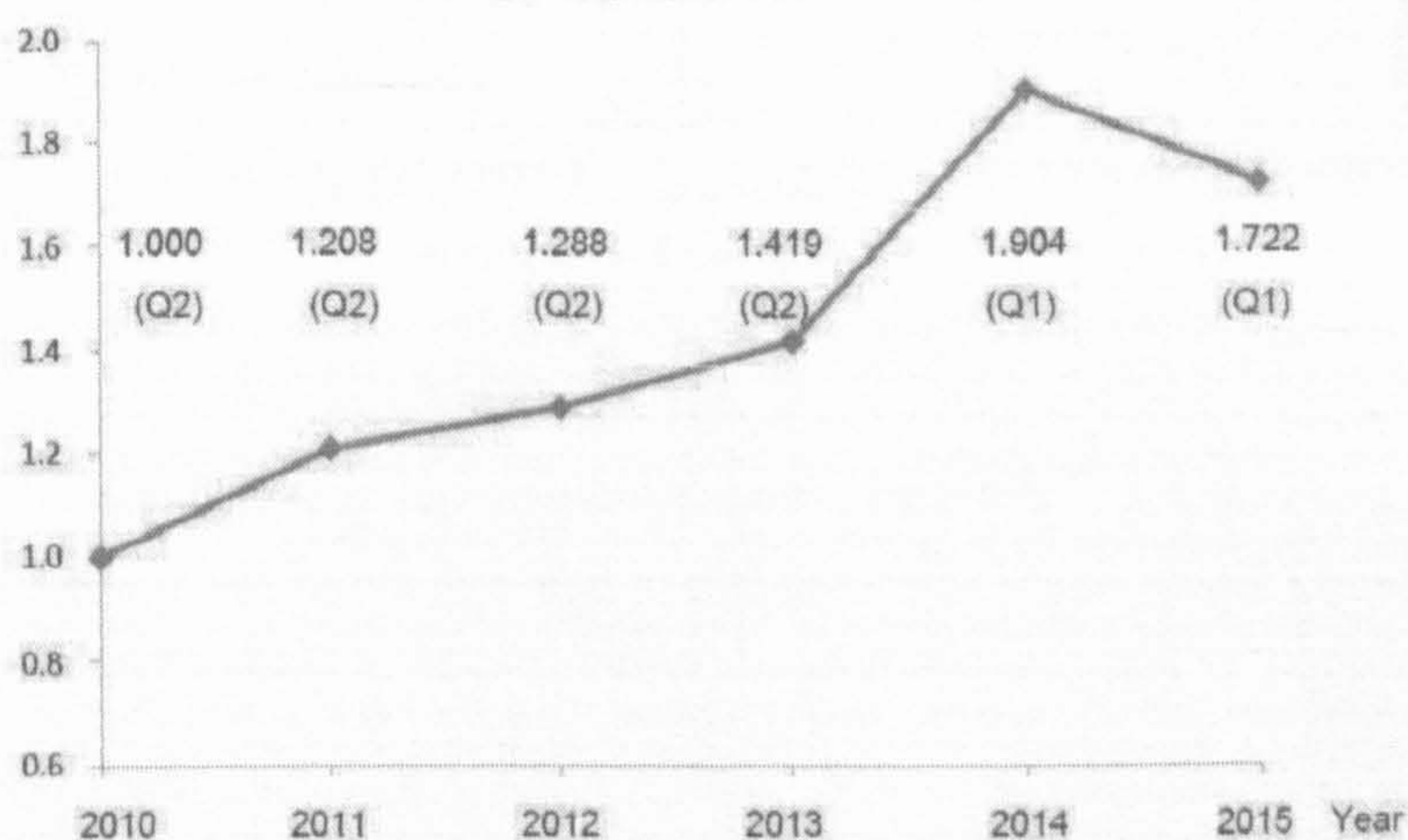
Manuscripts can be submitted online at the manuscript center:

<http://mc03.manuscriptcentral.com/inz>

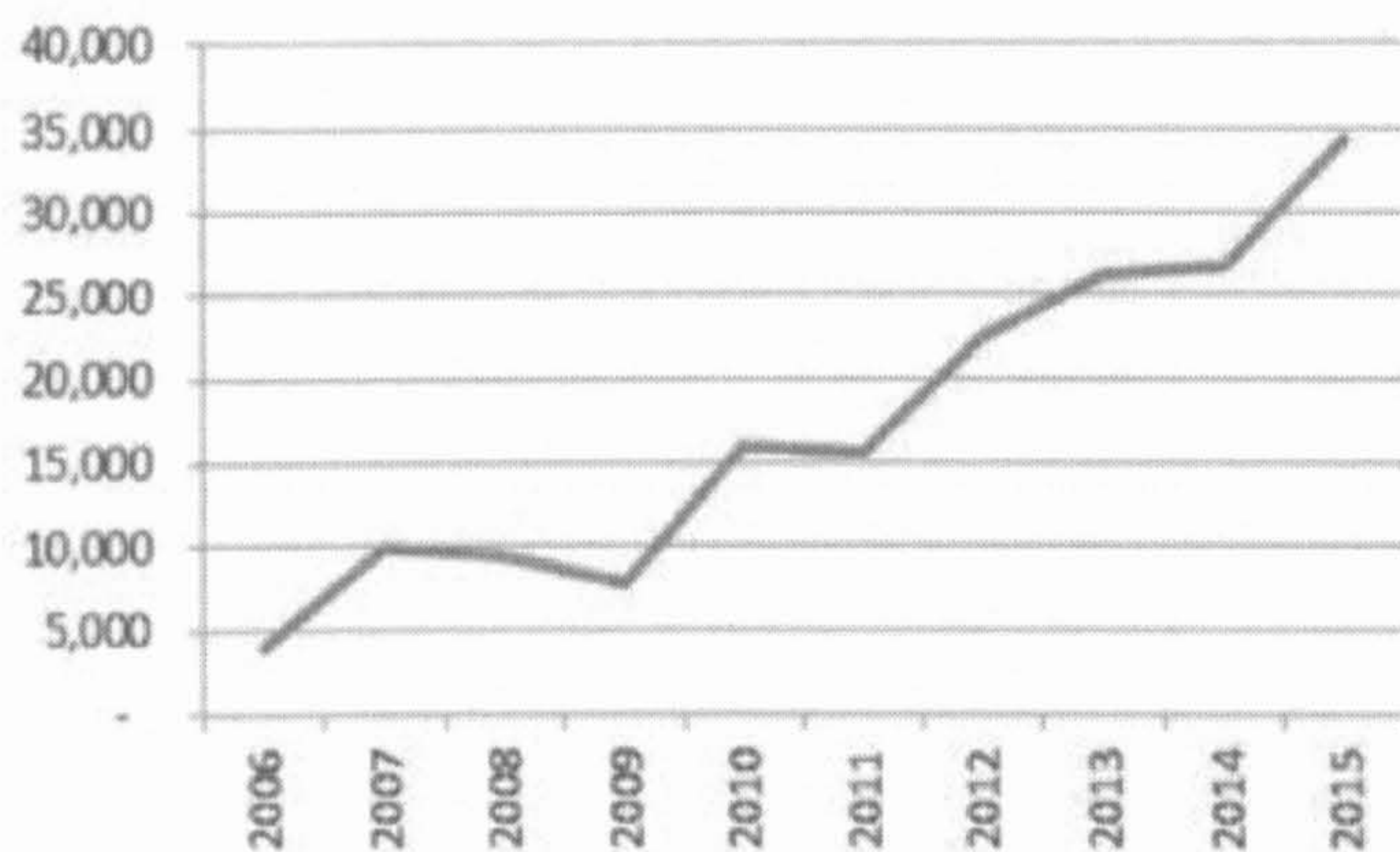
WILEY

Integrative Zoology's steadily increased since it was SCI indexed, placing the journal in the Q1 (top 25% of zoology journals).

2-yr Impact Factor

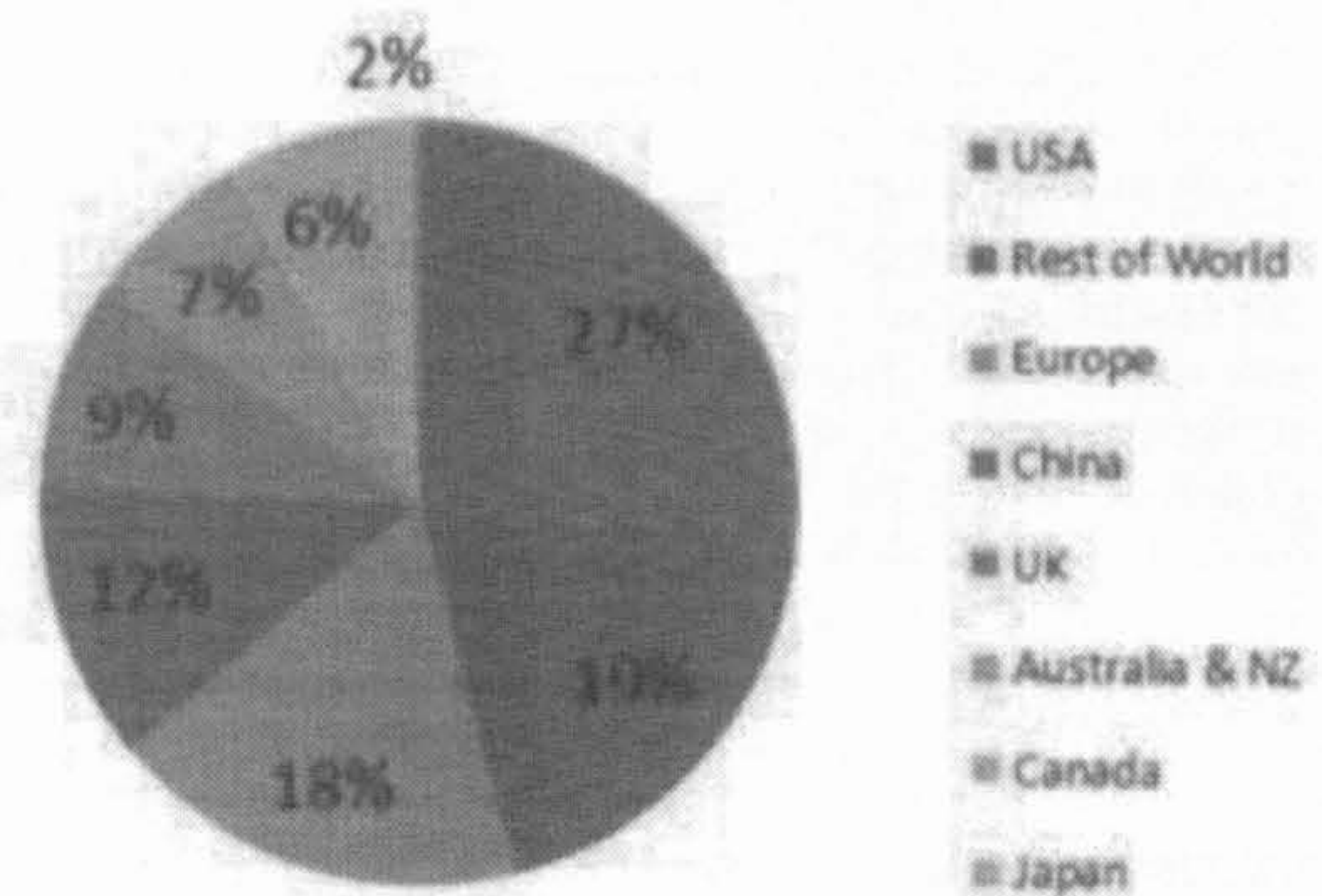


Article Downloads: Trends Over Time



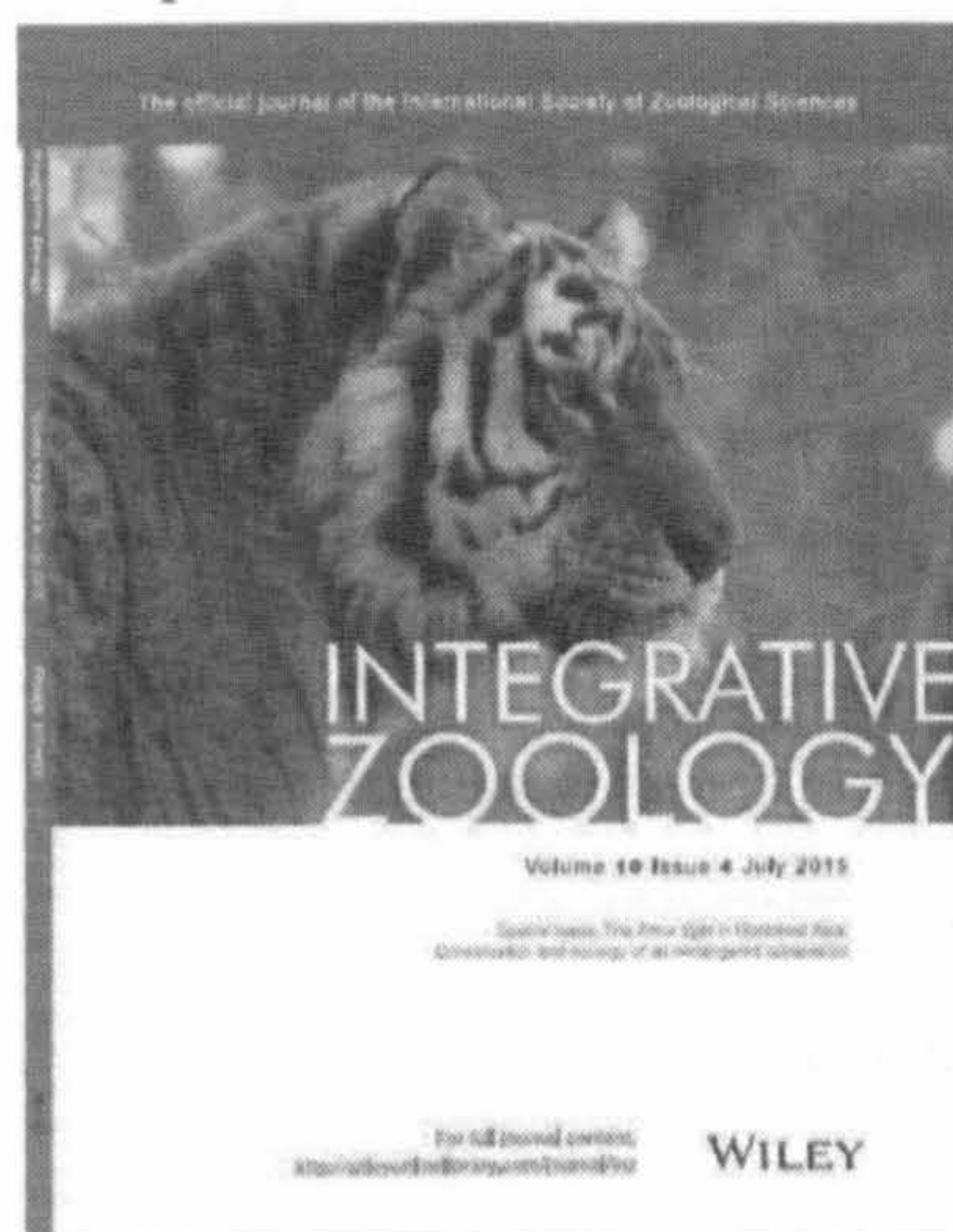
INZ had article 35,000 downloads in 2015, a sharp 32% increase from the previous year

Global Readership: Article Downloads by Region

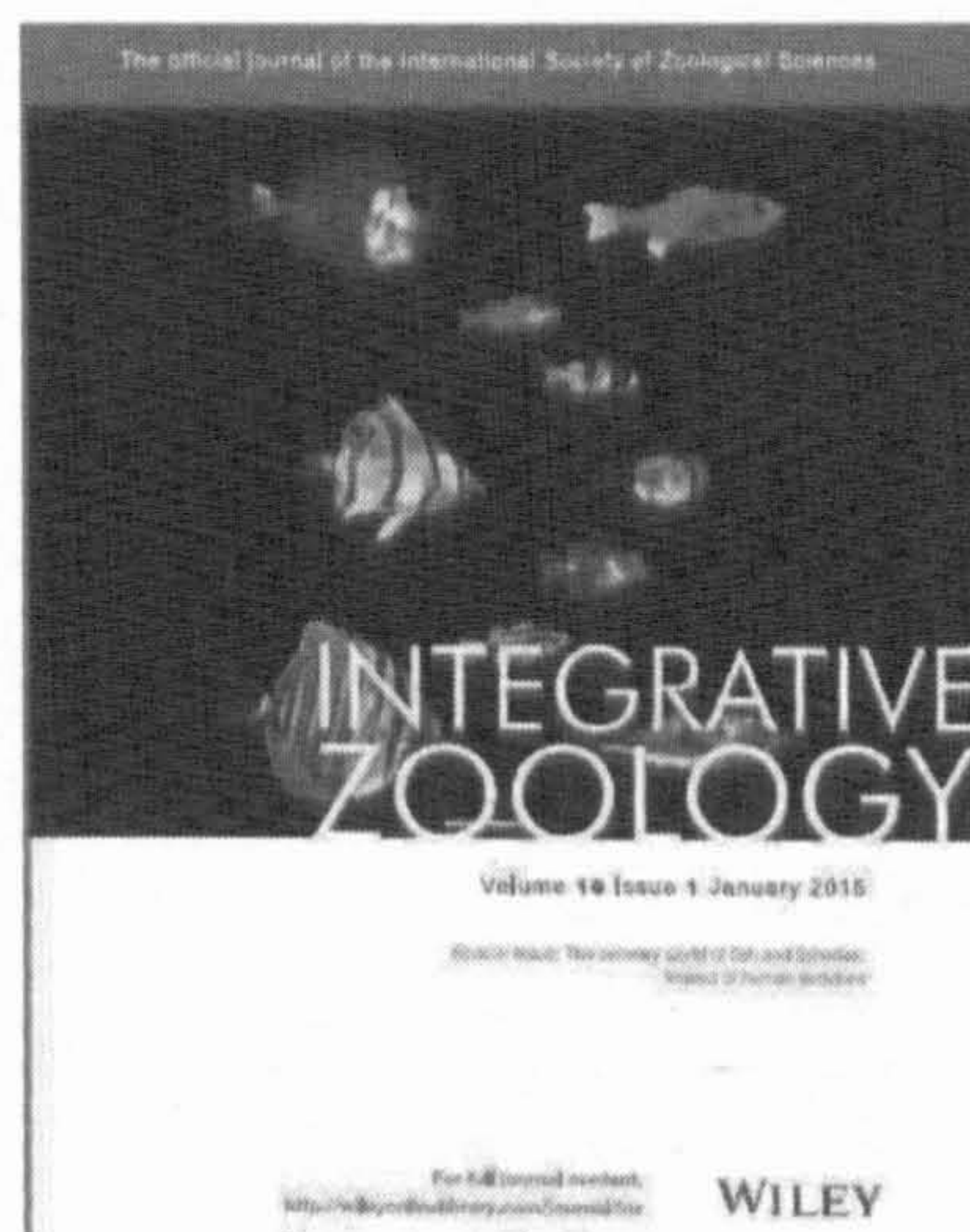


Integrative Zoology has a global readership and reaches 5,000 institutions worldwide

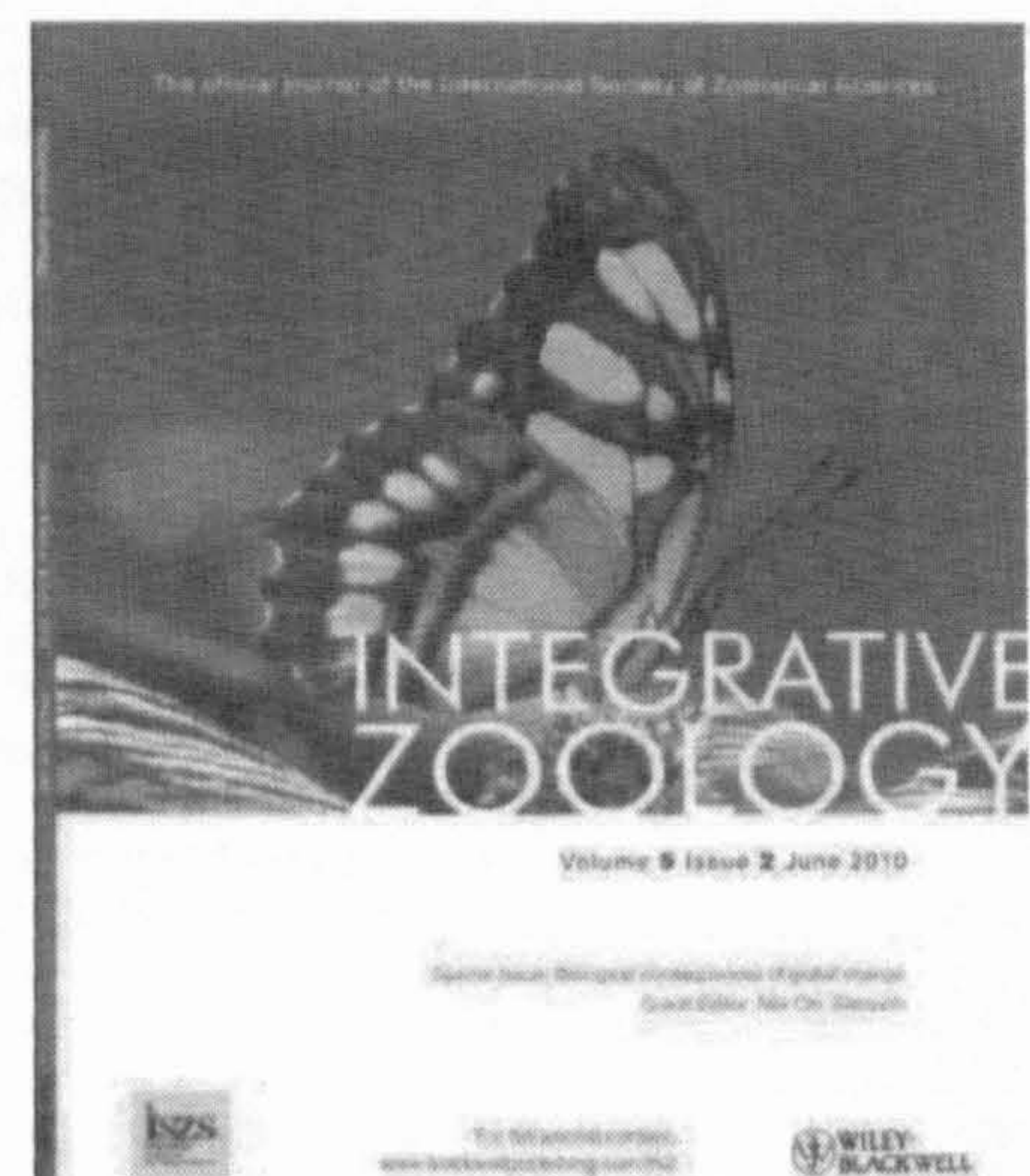
Special Issues



Tiger Conservation and Ecology



Human impacts on Fish



Biological Consequences of Global Change

Call for Papers

Integrative Zoology presents a broad perspective of many levels of zoological inquiry and publishes papers on many varied subjects, including:

- Biodiversity
- Evolution
- Conservation
- Immunology
- Invasive Species
- Genetics
- Ecology
- Biology

Integrative topics of great interest

- (1) Animals and climate change,
- (2) Animals and pollution,
- (3) Animals and infectious diseases,
- (4) Animals & biological invasions,
- (5) Animal-plant interactions,
- (6) Zoogeography & paleontology,
- (7) Neurons, genes, and behavior,
- (8) Molecular ecology and evolution,
- (9) Physiological adaptations.

ATTENDEES

Fabiola Judith Gandarilla Aizpuro
Universidad Nacional Autónoma de México,
Mexico
fabiolaj.gandarilla@gmail.com

Jason Richard Ali
University of Hong Kong, China
jrli@hku.hk

Ahmed Mohajja Alshammari
Ha'il University, Saudi Arabia
Leedsaspect@gmail.com

Yolarnie Maria Amepou
University of Canberra, Australia
yamepou2014@gmail.com

Natee Ampai
Kasetsart University, Thailand
Natee_ampai@yahoo.com

Tashitso Anamza
University of Kansas, USA
tashitso@ku.edu

Nataliia B. Ananeva
Zoological Institute, Russian Academy of
Sciences, Russia
azemiops@zin.ru

Juan Pascual Anaya
RIKEN, Japan
juan.pascualanaya@riken.jp

Jason Scott Anderson
University of Calgary, Canada
janders@ucalgary.ca

Jankowski André
University of Hamburg, Germany
andre.jankowski@zoologie.uni-hamburg.de

Rachael Ellen Antwis
University of Salford, UK
finance-traveloffice@salford.ac.uk

Anchalee Aowphol
Kasetsart University, Thailand
fsciac@ku.ac.th

Umilaela Arifin
Universität Hamburg, Germany
umilaela@gmail.com

Marco David Barquero Arroyo
Universidad de Costa Rica, Costa Rica
marco.barquero_a@ucr.ac.cr

Sara Louise Ashpole
St. Lawrence University, USA
sashpole@stlawu.edu

Fernanda R. de Avila
Universidade do Vale do Rio dos Sinos, Brazil
fernandar.avila@gmail.com

Claudio Alejandro Soto Azat
Universidad Andres Bello, Chile
csoto@unab.cl

Wieslaw Babik
Jagiellonian University, Poland
wieslaw.babik@uj.edu.pl

Leonardo Daniel Bacigalupe
Universidad Austral de Chile, Chile
lbacigal@gmail.com

Simon C. D. Baeckens
University of Antwerp, Belgium
simon.baeckens@uantwerp.be

Emma Katharine Bales
Technische Universität Braunschweig,
Germany
emmab2893@gmail.com

Izabela Menezes Barata
University of Kent, UK
ib208@kent.ac.uk

Isaac Isaac Manoel Barros
Federal Council of Veterinary Medicine,
Brazil
isaacalbuquerque@hotmail.com

Aaron M. Bauer
Villanova University, USA
aaron.bauer@villanova.edu

James Harrison Baxter-Gilbert
Macquarie University, Australia
jx_baxtergilbert@laurentian.ca

Yong-jian Bei
Yulin Normal University, China
beiyongjian@163.com

Elvire Alice Nouria Bestion
University of Exeter, UK
e.bestion@exeter.ac.uk

Wouter Beukema
Ghent University, Belgium
wouter.beukema@ugent.be

Xue Bian
La Trobe University, Australia
18200828@students.latrobe.edu.au

David Patrick Bickford
National University of Singapore, Singapore
rokrokbickford@gmail.com

Phillip J. Bishop
University of Otago, New Zealand
phil.bishop@otago.ac.nz

David Chambers Blackburn Jr
University of Florida, USA
dblackburn@flmnh.ufl.edu

Molly Catherine Bletz
Technische Universitat Braunschweig,
Germany
molly.bletz@gmail.com

David Terrington Booth
University of Queensland, Australia
d.booth@uq.edu.au

Amaël Borzée
Seoul National University, Korea
amaelborzee@gmail.com

Renata Brandt
University of São Paulo, Brazil
rbrandt@usp.br

Leon Russell John Briggs
Victoria University of Wellington, New
Zealand
leonbriggs70@yahoo.com

Chris Broeckhoven
Stellenbosch University, South Africa
cbroeck@sun.ac.za

Rafe M. Brown
University of Kansas, USA
rafe@ku.edu

Xing-jiang Bu
Anhui Normal University, China
buxingjiang@163.com

Gordon Martin Burghardt
University of Tennessee, USA
gburghar@utk.edu

Andrew Stephen Buxton
University of Kent, UK
asb40@kent.ac.uk

Bo Cai
Chengdu Institute of Biology, CAS, China
caibo@cib.ac.cn

Michael Wayne Caldwell
University of Alberta, Canada
mw.caldwell@ualberta.ca

Patrick Donaldson Campbell
Natural History Museum, UK
pdc@nhm.ac.uk

David Charles Cannatella
University of Texas at Austin, USA
catfish@utexas.edu

Gustavo Adolfo Agudelo Cantero
University of São Paulo, Brazil
gustavo.a.agudelo@gmail.com

John George Capano
Brown University, USA
John_Capano@Brown.edu

Robert Eugene del Carlo
University of Nevada School of Medicine,
USA
rdelcarlo@medicine.nevada.edu

Salgado Costa Carolina
University of La Plata, Argentina
krosalgadoc@gmail.com

Francisca Milena Leal Carvajalino
University of Florida, USA
fleal@ufl.edu

Corey Dale Cates
Auburn University, USA
cdc0048@auburn.edu

Long-hui Chai
Northeast Forestry University, China
chailonghui@126.com

Yi-chun Chang
National Taiwan Normal University, China
formosamen@gmail.com

Jing Che
Kunming Institute of Zoology, CAS, China
chej@mail.kiz.ac.cn

Li-heng Che
Sun Yat-sen University, China
cheliheng@126.com

Bo-jian Chen
Northwest A & F University, China
chenbojian1985@126.com

Cang-song Chen
Zhejiang Museum of Natural History, China
ccs531@126.com

Hong-man Chen
Kunming Institute of Zoology, CAS, China
chenhm@mail.kiz.ac.cn

Jian-ye Chen
American Museum of Natural History, USA
jchen@amnh.org

Jing-feng Chen
Chengdu Institute of Biology, CAS, China
chenjf@cib.ac.cn

Meng-yun Chen
Sun Yat-sen University, China
chenmy33@mail2.sysu.edu.cn

Qiang Chen
Lanzhou University, China
chenq@lzu.edu.cn

Qin Chen
Chengdu Institute of Biology, CAS, China
chenqin@cib.ac.cn

Qiu-sheng Chen
Nanjing Agricultural University, China
chenqsh305@njau.edu.cn

Shu Chen
Kunming Institute of Zoology, CAS, China
shu.chen@ioz.ac.cn

Xiao-hong Chen
Henan Normal University, China
xhchen_xx5026@sina.com

Yi-jing Chen
Nanjing Normal University, China
chenyijing0325@163.com

Yue-ying Chen
Chengdu Institute of Biology, CAS, China
chenyy@cib.ac.cn

Zhong-yin Chen
Hainan Tropical Ocean University, China
swsy008@163.com

Zhuo Chen
Henan Normal University, China
chenzhuo-2005@163.com

Chuan-bin Cheng
Tunghai University, China
djlizardman@gmail.com

Margarita R. Chiaraviglio
Universidad Nacional de Córdoba, Argentina
mchiaraviglio@gmail.com

Hanna Cho
Kangwon National University, Korea
hello_hanna@nate.com

Juan Jose Calvete Chornet
Instituto de Biomedicina de Valencia, CSIC,
Spain
jcalvete@ibv.csic.es

Wen-hao Chou
National Museum of Natural Science, China
whchou@mail.nmns.edu.tw

Ming-feng Chuang
Tunghai University, China
adammfc@gmail.com

Jessyca Michele Citadini
University of São Paulo, Brazil
jessyca.citadini@gmail.com

Gabriel Jorgewich Cohen
University of São Paulo, Brazil
gabrieljcohen2@gmail.com

Jeremy Cohen
University of South Florida, USA
jcohen9@mail.usf.edu

Claudia Corti
Museo di Storia Naturale dell'Università di
Firenze, Italy
claudia.corti@unifi.it

Julien Courant
UMR 7179 CNRS/MNHN, France
jcourant@hotmail.fr

Andrew Jackson Crawford
Universidad de los Andes, Colombia
crawfordaj@gmail.com

Alison Marion Cree
University of Otago, New Zealand
alison.cree@otago.ac.nz

Jelka Crnobrnja-Isailović
University of Niš, Serbia
jelka.c.i@gmail.com

Jenna Margaret Crowe-Riddell
University of Adelaide, Australia
jenna.crowe-riddell@adelaide.edu.au

Fausto Roberto Méndez de la Cruz
Universidad Nacional Autónoma de México,
Mexico
faustomendez6@gmail.com

Jian-guo Cui
Chengdu Institute of Biology, CAS, China
cuijg@cib.ac.cn

Andrew A. Cunningham
Zoological Society of London, UK
a.cunningham@ioz.ac.uk

Hollis Anne Dahn
University of Central Florida, USA
hdahn@knights.ucf.edu

Raoul Van Damme
University of Antwerp, Belgium
raoul.vandamme@uantwerp.be

Domenic Corvasce D'Amore
Daemen College, USA
ddamore@daemen.edu

Ning-xin Dang
Chengdu Institute of Biology, CAS, China
331640397@qq.com

Indraneil Das
Universiti Malaysia Sarawak, Malaysia
idas@unimas.my

Jeffrey Stuart Dawson
Durrell Wildlife Conservation Trust, UK
jeff.dawson@durrell.org

Buddhi Dayananda
University of Technology Sydney, Australia
buddhi6@gmail.com

Mathieu Jean-Pierre N Denoël
University of Liege, Belgium
Mathieu.Denoel@ulg.ac.be

Antoinette M. Destefano
Bethune-Cookman University, USA
valerok@cookman.edu

Genevieve Diedericks
Stellenbosch University, South Africa
diedericks.genevieve@gmail.com

Guo-hua Ding
Lishui University, China
guohua_ding@hotmail.com

Li Ding
Chengdu Institute of Biology, CAS, China
dingli@cib.ac.cn

Carolin Dittrich
Museum für Naturkunde, Germany
carolin.dittrich@mfn-berlin.de

Min Seock Do
Kyung Hee University, Korea
snake@khu.ac.kr

Martyn Drabik-Hamshare
University of KwaZulu-Natal, South Africa
m.drabik.hamshare@gmail.com

Wei Du
Hangzhou Normal University, China

Wei-guo Du
Institute of Zoology, CAS, China
duweiguo@ioz.ac.cn

Yu Du
Hainan Tropical Ocean University, China
510119875@qq.com

Le Thi Thuy Duong
University of Science, Vietnam
lthduong@hcmus.edu.vn

Luke John Easton
University of Otago, New Zealand
easlu938@student.otago.ac.nz

Adria Rae Abigail R. Eda
Ateneo de Manila University, Philippines
adriaeda05@gmail.com

Shelley Edwards
Rhodes University, South Africa
s.edwards@ru.ac.za

Carla C. Eisemberg
Charles Darwin University, Australia
carlacea@yahoo.com.br

Semenishcheva Ekaterina
Far Eastern Federal University, Russia
semenkaty@gmail.com

Dmitrieva Elena
Lomonosov Moscow State University, Russia
aurelia@mail.ru

Andreas Elepfandt
Humboldt University Berlin, Germany
Andreas@Elepfandt.de

Aaron Elliott
Genomics, USA
Aaron.Elliott01@yahoo.com

Lozano Aguilar Luis Enrique
Instituto de Biologia, UNAM, Mexico
lozanoaguilarluisenrique@gmail.com

Paula Cabral Eterovick
Pontificia Universidade Católica de Minas
Gerais, Brazil
eterovick@yahoo.com

MD Tariq Ezaz
University of Canberra, Australia
Tariq.Ezaz@canberra.edu.au

Tian-qi Fan
Nanjing Normal University, China
NNU_FTQ@126.com

Xiao-li Fan
Lishui University, China
fanlilly227@126.com

Guang-zhan Fang
Chengdu Institute of Biology, CAS, China
fanggz@cib.ac.cn

Nathalie Monika Maria Feiner
Lund University, Sweden
nathalie.feiner@biol.lu.se

Mark Lawrence Feldman
Turtle Survival Alliance, New Zealand
nz.feldman@yahoo.com

Wen-xi Feng
Queen's University, Canada
l4wwf@queensu.ca

Yan-jie Feng
Sun Yat-sen University, China
fengyj3@mail2.sysu.edu.cn

Bruno de Oliveira Ferronato
University of Canberra, Australia
brunoferronato@hotmail.com

Gentile Francesco Ficetola
University of Grenoble-Alpes, France
francesco.ficetola@gmail.com

Francisco Humberto Dal Vechio Filho
University of São Paulo, Brazil
francisco.dalvechio@gmail.com

Jonathan Julio Fong
Lingnan University, China
jonfong@ln.edu.hk

Jim Foster
Amphibian & Reptile Conservation, UK
jim.foster@arc-trust.org

Uwe Klaus Norbert Fritz
Senckenberg Natural History Collections
Dresden, Germany
ufritz@senckenberg.de

Darrel Richmond Frost
American Museum of Natural History, USA
frost@amnh.org

Chao Fu
Central China Normal University, China
642161086@qq.com

Jin-zhong Fu
Chengdu Institute of Biology, CAS, China
jfu@uoguelph.ca

Michael C. Fulbright
University of Louisiana at Lafayette, USA
fulbrightm@louisiana.edu

Sarig Gafny
Ruppin Academic Center, Israel
sarig@ruppin.ac.il

Eva Catharina Madelene Gallacher
National University of Singapore, Singapore
catharina.gallacher@gmail.com

Eduard Artashesovich Galoyan
Zoological Museum of Moscow State
University, Russia
saxicola@mail.ru

Anthony Blake Gamble
Marquette University, USA
tgamble@geckoevolution.org

Jian-fang Gao
Hangzhou Normal University, China
wch8hz@outlook.com

Ke-qin Gao
Peking University, China
kqgao@pku.edu.cn

Lei Gao
Central China Normal University, China
1292178007@qq.com

Wei Gao
Kunming Institute of Zoology, CAS, China
gaowei1160@163.com

Andrea Elizabeth Narvaez Garcia
La Trobe University, Australia
aenarvaezgarcia@students.latrobe.edu.au

Trenton Garner
Zoological Society of London, UK
trent.garner@ioz.ac.uk

Samantha Elaine Garza
Seoul National University, Korea
swojciechowski@snu.ac.kr

Bao-rong Geng
Fujian Normal University, China
brgeng@fjnu.edu.cn

Arthur Georges
University of Canberra, Australia
georges@aerg.canberra.edu.au

Damien Nicolas Esquerre Gheur
Australian National University, Australia
esquerre.damien@gmail.com

João Gabriel Ribeiro Giovanelli
Universidade Estadual Paulista, Brazil
jgiovanelli@gmail.com

Richard Elliott Glor
University of Kansas, USA
glor@ku.edu

Matthias Goetz
Durrell Wildlife Conservation Trust, UK
matt.goetz@durrell.org

Philippe Golay
Elapsoidea, Switzerland
gogo@geneva-link.ch

Fernando Ribeiro Gomes
University of São Paulo, Brazil
frgomes@usp.br

Shi-ping Gong
Guangdong Entomological Institute, China
gongsp@gdei.gd.cn

Wun-bin Gong
National Dong Hwa University, China
9608002@ems.ndhu.edu.tw

David John Gower
The Natural History Museum, UK
d.gower@nhm.ac.uk

Sonny Johana Goyes-Vallejos
University of Connecticut, USA
johana.goyes@uconn.edu

Taran Grant
University of São Paulo, Brazil
taran.grant@gmail.com

Matthew James Gray
University of Tennessee, USA
mgray11@utk.edu

Martina Gregorovičová
Czech Academy of Sciences, Czech
martina.greg@email.cz

Richard Alun Griffiths
University of Kent, UK
R.A.Griffiths@kent.ac.uk

Jared Anthony Grummer
University of Washington, USA
grummer@uw.edu

Agustin Camacho Guerrero
University of São Paulo, Brazil
agustincamacho@usp.br

Saul Filemon Dominguez Guerrero
Universidad Nacional Autónoma de México,
Mexico
sauldguerrero@gmail.com

Kun Guo
Nanjing Normal University, China
guokun8808@163.com

Peng Guo
Yibin University, China
ybguo@163.com

Rui Guo
Lanzhou University, China
guor14@lzu.edu.cn

Wei-bo Guo
Nanjing Institute of Environmental Sciences,
MEPC, China
guoweibo901201@126.com

Yue Guo
Central China Normal University, China
1290174611@qq.com

Preeti Gururaja
Suri Sehgal Centre for Biodiversity and
Conservation, India
priti.gururaj@atree.org

Lumir Gvoždík
Institute of Vertebrate Biology, ASCR, Czech
gvozdik@brno.cas.cz

Václav Gvoždík
National Museum, Czech
vaclav.gvozdik@gmail.com

Alexander Scott Hall
University of Texas at Arlington, USA
allopatry@gmail.com

Bálint Halpern
MME BirdLife Hungary, Hungary
balint.halpern@gmail.com

Chun-xu Han
Integrative Zoology, China
iszs2@ioz.ac.cn

Samuel Benjamin Handy
UK
sam.handy@hotmail.com

James Hanken
Harvard University, USA
hanken@oeb.harvard.edu

Takashi Haramura
Kyoto University, Japan
haramura.takashi.2n@kyoto-u.ac.jp

Gemma Harding
University of Kent, UK
Gemmah20@hotmail.com

Peter Stanley Harlow
Taronga Conservation Society Australia,
Australia
pharlow@zoo.nsw.gov.au

Ruhana Hassan
Universiti Malaysia Sarawak, Malaysia
hruhana@unimas.my

Chong He
Sun Yat-sen University, China
biohe@foxmail.com

Matthew Paul Heinicke
University of Michigan-Dearborn, USA
heinicke@umich.edu

Angela María Mendoza Henao
Universidad Nacional Autónoma de México,
México
am.mendozah@gmail.com

Jelger Erik Herder
RAVON, The Netherlands
j.herder@ravon.nl

Mateusz Hermyt
University of Silesia, Poland
mateusz.hermyt@gmail.com

Sandra Victoria Flechas Hernandez
Universidad de los Andes, Colombia
vickyflechas@gmail.com

Jean-Marc Hero
Griffith University, Australia
m.hero@griffith.edu.au

Anthony Herrel
The French National Center for Scientific
Research, France
anthony.herrel@mnhn.fr

Elizabeth Mary Hill
Gettysburg College, USA
hillel01@gettysburg.edu

David M. Hillis
University of Texas, USA
dhillis@austin.utexas.edu

Tan Choo Hock
University of Malaya, Malaysia
tanchoohock@gmail.com

Karin Brigit Holthaus
University of Bologna, Italy
karinbrigi.holthaus2@unibo.it

Masanao Honda
University of Tsukuba, Japan
honda.masanao.ge@u.tsukuba.ac.jp

Mei-ling Hong
Hainan Normal University, China
25426230@qq.com

Nuri Hong
Seoul National University, Korea
saeun5253@naver.com

Marinus Steven Hoogmoed
Museu Paraense Emilio Goeldi, Brazil
marinus@museu-goeldi.br

Mian Hou
Sichuan Normal University, China
turtlechina@126.com

Josiane Y. Hraoui-Bloquet
Lebanese University, Lebanon
sdbloquet@yahoo.com

Yu-wei Hsiao
National Taiwan Normal University, China
portgasdace20@gmail.com

Jung-ya Hsu
National Museum of Natural Science, China
pygmalion@mail.nmns.edu.tw

Jun-hua Hu
Chengdu Institute of Biology, CAS, China
hujh@cib.ac.cn

Fang Huang
Nanjing Normal University, China
huangfang_elf@163.com

Ji Huang
Shanghai Museum of Nature, China
Huangj@sstm.org.cn

Min-yi Huang
Anqing Normal University, China
huang.m.y@163.com

Song Huang
Huangshan University, China
snakeman@hsu.edu.cn

Wen-san Huang
National Museum of Natural Science, China
wshuang.380@gmail.com

Yong Huang
Guangxi Botanical Garden of Medicinal
Plants, China
huangykiz@163.com

Yong-jie Huang
Lanzhou University, China
huyoji423@126.com

Cameron M. Hudson
University of Sydney, Australia
cam.hudson@gmail.com

Nguyen Ngoc Hung
National Taiwan Normal University, China
nguyen.hung.uns@gmail.com

Hoang Duc Huy
University of Science, Vietnam
hdhuy@hcmus.edu.vn

Menzies James Ian
Research Fellow, Australia
james.menzies@adelaide.edu.au

Carlos Arturo Navas Iannini
University of São Paulo, Brazil
carlos.a.navas2@gmail.com

Nora R. Ibargüengoytía
Universidad Nacional del Comahue, Argentina
noraibarg@gmail.com

Adel Abdelshakour Elsayed Ibrahim
Suez University, Egypt
dolaibrahim@yahoo.com

Takeshi Igawa
Hiroshima University, Japan
tigawa@hiroshima-u.ac.jp

Flora Ihlow
Zoologisches Forschungsmuseum Alexander
Koenig, Germany
F.Ihlow@ZFMK.de

Koji Iizuka
Kanda-Hitotsubashi Jr. High School, Japan
salamander@w8.dion.ne.jp

Rao Rayavarapu Jagannadha
Jiwaji University, India
rjrao09@gmail.com

Jins Vallanatu James
Salim Ali Centre for Ornithology and Natural
History, India
jinsvj@gmail.com

Ronald A. Javitch
Javitch Natural History Rare Book Foundation,
Canada
biblijav@total.net

Daniel Lee Jeffries
University of Lausanne, Switzerland
Daniellee.Jeffries@unil.ch

Robert Kaspar Alois Jehle
University of Salford, UK
r.jehle@salford.ac.uk

Robert W. G. Jenkins
Creative Conservation Solutions, Australia
hank.jenkins@consol.net.au

Olga Alejandra Zamora Jerez
The University of Manchester, UK
alejazamora10@gmail.com

Xiang Ji
Nanjing Normal University, China
xiangji150@hotmail.com

Hui Jia
Beijing Normal University, China
zhangwenyi322@Gmail.com

Jia Jia
Peking University, China
jia_jia@pku.edu.cn

Zhi-yun Jia
Current Zoology, China
jiazy@ioz.ac.cn

Fan Jiang
Chengdu Institute of Biology, CAS, China
jiangfan@cib.ac.cn

Jian-ping Jiang
Chengdu Institute of Biology, CAS, China
jiangjp@cib.ac.cn

Ke Jiang
Kunming Institute of Zoology, CAS, China
jiangke87615@hotmail.com

Xu-fei Jiang
Nanjing Normal University, China
330558620@qq.com

Hong Jin
Chengdu Institute of Biology, CAS, China
jheenna_2007@163.com

Yuan-ting Jin
China Jiliang University, China
jinyuanting@126.com

Klaus-Ulrich Joger
State Natural History Museum, Germany
u.joger@3landesmuseen.de

Teppei Jono
University of Ryukyus, Japan
mjustinondo@gmail.com

Moriyama Jun
Kyoto University, Japan
j.moriyama@zoo.zool.kyoto-u.ac.jp

Jihwa Jung
Seoul National University, Korea
biyam8712@naver.com

Paweł A. Kaczmarek
University of Silesia, Poland
pkaczmarek@us.edu.pl

Hinrich Kaiser
Victor Valley College, USA
chalcopis@yahoo.com

Takuma Kaito
University of the Ryukyus, Japan
kaitoh.t@gmail.com

Rachunliu Gaiduwan Kamei
Natural History Museum, UK
kamei.chun@gmail.com

Naoki Kamezaki
Okayama University of Science, Japan
kamezaki-naoki@nifty.com

Eric G. Kazitsa
Central China Normal University, China
kazitsae@yahoo.fr

Erin Kennedy Kenison
Purdue University. USA
ekenison@purdue.edu

John Scott Keogh
Australian National University, Australia
scott.keogh@anu.edu.au

Ryan Robert Kerney
Gettysburg College, USA
rkerney@gettysburg.edu

Janak Raj Khatiwada
Chengdu Institute of Biology, CAS, China
nepalhimlaya@gmail.com

Kristina Heidy Kikillus
Victoria University of Wellington, New Zealand
Heidy.Kikillus@gmail.com

Il-Hun Kim
National Marine Biodiversity Institute of Korea, Korea
ihkim@mabik.re.kr

Carolin Kindler
Senckenberg Natural History Collections
Dresden, Germany
carolin.kindler@senckenberg.de

Manjunatha Ramachandra Rao Kini
National University of Singapore, Singapore
dbskinim@nus.edu.sg

Tom Kirschey
Nature and Biodiversity Conservation Union, Germany
tom.kirschey@nabu.de

Jörn Köhler
Hessisches Landesmuseum Darmstadt, Germany
koehler@hlmd.de

Tiana Kohlsdorf
University of São Paulo, Brazil
tiana_kohlsdorf@ffclrp.usp.br

Yosuke Kojima
Kyoto University, Japan
y_cojima@ethol.zool.kyoto-u.ac.jp

Shohei Komaki
Hiroshima University, Japan
cynops00pyrrhogaster@gmail.com

Sungsik Kong
University of Toronto, Korea
sungsik.kong@gmail.com

Akihiro Koshikawa
Japan
akihiro.koshikawa@mac.com

Georgia Karoline Kosmala
University of Sydney, Australia
geh_karol@hotmail.com

Magdalena M. Kowalska
University of Silesia, Poland
mkowalska5@us.edu.pl

Lukáš Kratochvíl
Charles University, Czech
lukas.kratochvil@natur.cuni.cz

Edward Frederick Kraus
University of Michigan, Ann Arbor, USA
fkraus@umich.edu

John Dean Krenz
Minnesota State University, USA
john.krenz@mnsu.edu

Gerald Kuchling
University of Western Australia, Australia
Gerald.Kuchling@uwa.edu.au

Yu-wei Kuo
Chung Hsing University, China
sam81830@gmail.com

Alexander Kupfer
State Museum of Natural History Stuttgart,
Germany
alexander.kupfer@smns-bw.de

Kazuki Kurita
Kyoto University, Japan
kurita@zoo.zool.kyoto-u.ac.jp

Kenro Kusumi
Arizona State University, USA
kenro@asu.edu

Sera Kwon
Kangwon National University, Korea
sera0622@hanmail.net

Engkamat Anak Lading
Department of Forestry, Sarawak, Malaysia
engkamal@sarawak.gov.my

Aparna Lajmi
Indian Institute of Science, India
aparna.lajmi@gmail.com

Markus Stefan Lambertz
Rheinische Friedrich-Wilhelms-Universität
Bonn, Germany
lambertz@uni-bonn.de

Anthony Lau
University of Hong Kong, China
antlau1@gmail.com

Michael Lau
WWF-Hong Kong, China
mlau@wwf.org.hk

LAURILA, Anssi Jaakko Tapani
Uppsala University, Sweden
anssi.laurila@ebc.uu.se

Michel Laurin
CR2P CNRS, France
laurin@mnhn.fr

Edgar Lehr
Illinois Wesleyan University, USA
elehr@iwu.edu

Juan Lei
University of Queensland, Australia
lj881204@gmail.com

Ben Li
East China Normal University, China
benlee19@163.com

Cheng Li
Chengdu Institute of Biology, CAS, China
licheng@cib.ac.cn

Chen-hong Li
Shanghai Ocean University, China
chli@shou.edu.cn

Hong Li
Nanjing Normal University, China
njlihong@outlook.com

Jiang-ni Li
Sun Yat-sen University, China
lijiangni123@163.com

Jia-tang Li
Chengdu Institute of Biology, CAS, China
lijt@cib.ac.cn

Jun Li
Central China Normal University, China
lijun790917@hotmail.com

Peng Li
Nanjing Normal University, China
biolipeng@163.com

Shu-ran Li
Institute of Zoology, CAS, China
lishuran074@163.com

Yi-ming Li
Institute of Zoology, CAS, China
liym@ioz.ac.cn

Yu-long Li
Chengdu Institute of Biology, CAS, China
liyl@cib.ac.cn

Yu-xia Li
Nanjing Normal University, China
liyuxia618@126.com

Dan Liang
Sun Yat-sen University, China
liangd8@mail.sysu.edu.cn

Gang Liang
Shanxi Normal University, China
lianggang@snnu.edu.cn

Shi-yuan Liang
Nanjing Normal University, China
18795902101@163.com

Xi-xi Liang
Chengdu Institute of Biology, CAS, China
liangxx@cib.ac.cn

Zhi-yong Liao
Wenzhou University, China
zyliap@163.com

Chi-xian Lin
Hainan Tropical Ocean University, China
lcx8883@sina.com

Jhan-wei Lin
National Taiwan Normal University, China
jhanwei.lin@gmail.com

Jian-qing Lin
Zhejiang University, China
linjianqing2009@163.com

Liu Lin
Hainan Normal University, China
kylelinliu@163.com

Long-hui Lin
Hangzhou Normal University, China
herplab@sina.com

Si-min Lin
National Taiwan Normal University, China
fish@ntnu.edu.tw

Zhi-hua Lin
Lishui University, China
zhlin1015@126.com

Hong Liu
Shenzhen Entry-Exit Inspection and
Quarantine Bureau, China
liuhong@szciq.gov.cn

Peng Liu
Harbin Normal University, China
liupeng111111@163.com

Qin Liu
Yibin University, China
546376235@qq.com

Qi-ze Liu
Hainan Tropical Ocean University, China
1144837821@qq.com

Xuan Liu
Institute of Zoology, CAS, China
liuxuan@ioz.ac.cn

Zu-yao Liu
Sun Yat-sen University, China
leonardliu0910@163.com

Michael Latter Logan
Stellenbosch University, South Africa
mike.logan1983@gmail.com

Chia-wei Lu
National Taiwan Normal University, China
virgo800909@hotmail.com

Hong-liang Lu
Hangzhou Normal University, China
honglianglu@live.cn

You-qiang Lu
Xinyang Normal University, China
youqiangl@126.com

Lai-gao Luo
Chuzhou University, China
luolaigao@sina.com

Zhen-hua Luo
Central China Normal University, China
luozh@mail.ccnu.edu.cn

Bin Lv
Chengdu Institute of Biology, CAS, China
lvbin-3@163.com

Shun-qing Lv
Huangshan University, China
lusq@hsu.edu.cn

Li Ma
Nanjing Normal University, China
lmahz2011@163.com

Xiao-hui Ma
Kunming Institute of Zoology, CAS, China
822709690@qq.com

Aidan James Turner Mackay
University of Kent, UK
aidanmackay@hotmail.com

Simon Thomas Maddock
Reaseheath College, UK
s.t.maddock@gmail.com

Carla Bonetti Madelaire
University of São Paulo, Brazil
cmadelaire@yahoo.com.br

Wanigatunga Arachchige Dharshani
Mahaulpatha
University of Sri Jayewardenepura, Sri Lanka
mahaulpatha@yahoo.com

Tomohisa Makino
Kyoto University, Japan
t.makino.zool@gmail.com

Marcela Alejandra Vidal Maldonado
Universidad del Bío-Bío, Chile
mavidal@ubiobio.cl

John Henri Malone
University of Connecticut, USA
john.malone@uconn.edu

Stratis Manolis
Wildlife Management International, Australia
cmanolis@wmi.com.au

Mahmoud Sasa Marin
Universidad de Costa Rica, Costa Rica
msasamarin@gmail.com

Paolo Martelli
Ocean Park Corporation Hong Kong, China
joey.heung@oceanpark.com.hk

Eva Graciá Martínez
Miguel Hernández University, Spain
egracia@umh.es

Marcio Roberto Costa Martins
University of São Paulo, Brazil
martinsmrc@usp.br

Irina V. Maslova
Institute of Biology and Soil Science, Russia
irinarana@mail.ru

Masafumi Matsui
Kyoto University, Japan
fumi@zoo.zool.kyoto-u.ac.jp

Stöck Matthias
Leibniz-Institute of Freshwater Ecology and
Inland Fisheries, Germany
matthias.stoeck@igb-berlin.de

Evan Merle McCartney-Melstad
University of California, Los Angeles, USA
evanmelstad@ucla.edu

Michael Scott McFadden
Taronga Conservation Society Australia,
Australia
mmcfadden@zoo.nsw.gov.au

John Measey
Stellenbosch University, South Africa
jmeasey@sun.ac.za

Konrad Mebert
Universidade Estadual de Santa Cruz,
Switzerland
konradmebert@gmail.com

Susana Marlin Medina
Consejo Nacional de Investigaciones
Científicas y Técnicas, Argentina
marlinmedina74@gmail.com

Madhava Priyantha Bandara Meegaskumbura
University of Peradeniya, Sri Lanka
madhava_m@mac.com

Jessica Hua Meindl
Binghamton University, USA
jhua@binghamton.edu

Roberta Graboski Mendes
University of São Paulo, Brazil
roberta.graboski@gmail.com

Mark Edwin Merchant
Mcneese State University, USA
mmerchant@mcneese.edu

Helen Miriam Rosemary Meredith
Amphibian Survival Alliance and
Synchronicity Earth, UK
helen.meredith@zsl.org

Kevin Robert Messenger
Alabama A & M University, USA
herpsrule2@aol.com

Alexander Martin Meurer
Deutsche Gesellschaft für Herpetologie and
Terrarienkunde, Germany
meurer@dght.de

Jian-dong Miao
Nanjing Normal University, China
nsdmiao@126.com

Marcus Michelangeli
Monash University, Australia
marcus.michelangeli@monash.edu

Mi-Sook Min
Seoul National University, Korea
minbio@yahoo.co.kr

Ying-min Mo
East China Normal University, China
moyingmin92@163.com

Richard Anthony Mollard
Bivalin, Australia
mollard@bivalin.com

Diego Miguel Arenas Moreno
Universidad Nacional Autónoma de México,
Mexico
daigo_v@hotmail.com

Akira Mori
Kyoto University, Japan
gappa@ethol.zool.kyoto-u.ac.jp

Hinako Emma Moritoshi
Seishin Girls' High School, Japan
emmahinako@icloud.com

Hendrik Mueller
Jena University, Germany
hendrik.mueller@uni-jena.de

Rachel Lockridge Mueller
Colorado State University, USA
rachel.mueller@colostate.edu

Misbahul Munir
Graduate School of Bogor Agricultural
University, Indonesia
munir_1912@apps.ipb.ac.id

Yasunori Murakami
Ehime University, Japan
murakami.yasunori.mu@ehime-u.ac.jp

Yuki Murakami
Tokyo Metropolitan University, Japan
murakami-yuhki@ed.tmu.ac.jp

Fabián Bonilla Murillo
Universidad de Costa Rica, Costa Rica
fbonillamurillo@gmail.com

Robert W. Murphy
University of Toronto, Canada
bob.murphy@utoronto.ca

Francis Allan Muth
University of California, Riverside, USA
allan.muth@ucr.edu

Hiral Naik
University of Witwatersrand, South Africa
hiral.naik@hotmail.com

Violet Chikako Nakayama
University of California, Riverside, USA
vinakayama@gmail.com

Daniel J.D. Natusch
University of Sydney, Australia
d_natusch_14@hotmail.com

Roman Alexeevich Nazarov
Zoological Museum of Moscow State
University, Russia
r_nazarov@mail.ru

Aravind Anantharam Neelavar
Ashoka Trust For Research in Ecology and the
Environment, India
aravind@atree.org

Nicola Jane Nelson
Victoria University of Wellington, New
Zealand
nicola.nelson@vuw.ac.nz

Barry S. Nerhus
Institute for Conservation Research and
Education, USA
bnerhus@gmail.com

Christopher John Newman
Reptile and Exotic Pet Trade Association, UK
chris-newman@cviewmedia.com

Liu-wang Nie
Anhui Normal University, China
lwnie@mail.ahnu.edu.cn

Rasmus Nielsen
University of California, Berkeley, USA
rasmus_nielsen@berkeley.edu

Cui-juan Niu
Beijing Normal University, China
cjniu@bnu.edu.cn

Eric John Nordberg
James Cook University, Australia
ericjnordberg@gmail.com

Randall Lawrence Nydam
Midwestern University, USA
rnydam@midwestern.edu

Sumio Okada
Japan Hanzaki (Giant Salamander) Research
Institute, Japan
okadasumio@gmail.com

Hisanori Okamiya
Tokyo Metropolitan University, Japan
h.okamiya@gmail.com

Taku Okamoto
Kyoto University, Japan
tak@zoo.zool.kyoto-u.ac.jp

Kurtuluş Olgun
Adnan Menderes University, Turkey
kolgun@adu.edu.tr

Paul Michael Oliver
Australian National University, Australia
paul.oliver@anu.edu.au

Hidetoshi Ota
University of Hyogo, Japan
ota@sci.u-ryukyu.ac.jp; ohta@hitohaku.jp

Sean Otani
Tottori University, Japan
seanotani@hotmail.com

Sun-lei Pan
Central China Normal University, China
1378455715@qq.com

Tao Pan
Anhui University, China
pantao20070778@163.com

Christopher Laird Parkinson
University of Central Florida, USA
parkinson@ucf.edu

Frank Pasmans
Ghent University, Belgium
frank.pasmans@ugent.be

Luiza Figueiredo Passos
Univeristy of Salford, UK
luizafp@gmail.com

Jian-chi Pei
Nanjing Normal University, China
peijianchi@foxmail.com

Li-fang Peng
Huangshan University, China
werewolf30@sina.com

Johannes Benedikt Walter Dr Penner
Natural History Museum Berlin, Germany
johannes.penner@mfn-berlin.de

David Allen Penning
University of Louisiana at Lafayette, USA
davidapenning@gmail.com

Sandra Ellen Penske
Friedrich-Schiller-Universität, Germany
Sandra.Penske@uni-jena.de

Rachel Montesinos Martins Pereira
University of São Paulo, Brazil
kelmontesinos@gmail.com

Fernando Leon Torres Perez
Pontificia Universidad Catolica de Valparaiso,
Chile
fernando.torres@pucv.cl

Raúl Gómez Trejo Pérez
Universidad Nacional Autónoma de México,
Mexico
ragotp87@hotmail.com

Ronith Gila Bina Perl
Technische Universitat Braunschweig,
Germany
b.perl@gmx.net

Gad Perry
Texas Tech University, USA
gad.perry@ttu.edu

Daniel Petras
University of California, San Diego, USA
dpetras@ucsd.edu

Benjamin Lee Phillips
University of Melbourne, Australia
phillipsb@unimelb.edu.au

Carla Piantoni
University of São Paulo, Brazil
carla.piantoni@gmail.com

Jun Ping
Wenzhou University, China

Joana Isabel Sabino Pinto
Technische Universitat Braunschweig,
Germany
joanasabinopinto@gmail.com

Teresa Cristina Sauer de Avila Pires
Museu Paraense Emilio Goeldi, Brazil
avilapires@museu-goeldi.br

Roberto Márquez Pizano
University of Chicago, USA
rmarquezp@uchicago.edu

Nikolay A. Poyarkov
Lomonosov Moscow State University, Russia
n.poyarkov@gmail.com

Samuel Pratt
St. Lawrence University, USA
sfprat12@stlawu.edu

Stephanie Joyce Price
Victoria University of Wellington, New
Zealand
steph.price@vuw.ac.nz

Yin Qi
Chengdu Institute of Biology, CAS, China
qiyin@cib.ac.cn

Li-fu Qian
Anhui University, China
qianlif11035@163.com

Qing-bo Qiu
Hainan Tropical Ocean University, China
qiuqingbo@126.com

Yan-fu Qu
Nanjing Normal University, China
imwx-q@163.com

Noelikanto Ramamonjisoa
Nagoya University, Japan
noelikanto@gmail.com

Lea Aileen Randall
Calgary Zoological Society, Canada
lear@calgaryzoo.com

Ding-qi Rao
Kunming Institute of Zoology, CAS, China
raodq@mail.kiz.ac.cn

Arne Redsted Rasmussen
School of Conservation, Denmark
arr@kadk.dk

Rui Rebelo
University of Lisbon, Portugal
rmrebelo@fc.ul.pt

Renato Sousa Recoder
University of São Paulo, Brazil
renatorecoder@gmail.com

Sharon Renan
Tel-Aviv University, Israel
renansharon@gmail.com

Stephen J. Reynolds
Charles Darwin University, Australia
cycaus@yahoo.com.au

Corinne Richards-Zawacki
University of Pittsburgh, USA
coririchards@gmail.com

Spencer Ricky-John
Western Sydney University, Australia
ricky.spencer@uws.edu.au

Julia Lindsay Riley
Macquarie University, Australia
julia.riley@students.mq.edu.au

John Dale Roberts
University of Western Australia, Australia
dale.roberts@uwa.edu.au

Carlos Frederico Duarte da Rocha
Universidade do Estado do Rio de Janeiro,
Brazil
cfdrocha@gmail.com

Rafael Omar De Sa Rodriguez
University of Richmond, USA
rdesa@richmond.edu

Abel Antonio Batista Rodríguez
Senckenberg Institute, Panama
abelbatista@hotmail.com

Dennis Roedder
Zoologisches Forschungsmuseum Alexander
Koenig, Germany
d.roedder@zfmk.de

Pascale Van Rooij
Ghent University, Belgium
pascale.vanrooij@ugent.be

Gonçalo M. Rosa
University of Nevada, Reno, USA
goncalo.m.rosa@gmail.com

Juliana Gusson Roscito
Max Planck Institute, Germany
juroscito@gmail.com

Aniruddha Datta Roy
Indian Institute of Science, India
datta.roy82@gmail.com

Attapol Rujirawan
Kasetsart University, Thailand
rujirawan_bank@yahoo.com

Weronika G. Rupik
University of Silesia, Poland
weronika.rupik@us.edu.pl

Pamela L. Rutherford
Brandon University, Canada
rutherfordp@brandonu.ca

Patricia Alejandra Ramírez Saavedra
Victoria University of Wellington, New
Zealand
patricia.ramirez@vuw.ac.nz

Riyad Ahmad Sadek
American University of Beirut, Lebanon
rsadek@aub.edu.lb

Osamu Sakai
Kyoto University, Japan
osamu-lac@ethol.zool.kyoto-u.ac.jp

Andrés Valenzuela Sánchez
Universidad Andrés Bello, Chile
a.valenzuela.s@uandresbello.edu

Santiago José Sánchez-Pacheco
University of Toronto, Canada
santiago.sanchezpacheco@mail.utoronto.ca

Kate Laura Sanders
University of Adelaide, Australia
kate.sanders@adelaide.edu.au

Marites Bonachita Sanguila
Father Saturnino Urios University, Philippines
mbsanguila@urios.edu.ph

Marcileida Maria Dos Santos
University of Otago, New Zealand
marma950@student.otago.ac.nz

Erin L. Sauer
University of South Florida, USA
erinsauer@mail.usf.edu

Alan H. Savitzky
Utah State University, USA
savitzky@usu.edu

Johara Elizabeth Bourke Sazo
Hannover TiHo, Germany
johara.bourke@gmail.com

Mona Van Schingen
University of Cologne / Cologne Zoo,
Germany
mschinge@smail.uni-koeln.de

Arne Christian Schulze
Hessisches Landesmuseum Darmstadt,
Germany
arne.schulze@hlmd.de

Lisa Ellen Schwanz
University of New South Wales, Australia
l.schwanz@unsw.edu.au

Linda Schwarzkopf
James Cook University, Australia
lin.schwarzkopf@jcu.edu.au

Susan Schweiger
Jena University, Germany
susan.schweiger@uni-jena.de

Sengvilay Seateun
Kasetsart University, Thailand
aowphol_a@yahoo.com

Gabriele Senczuk
University of Rome, Italy
gabriele.senczuk@uniroma1.it

Megasooriya Mudiyanse Gayani Kausalya
Senevirathne
University of Peradeniya, Sri Lanka
gayani88s@gmail.com

Kadaba Shamanna Seshadri
National University of Singapore, Singapore
seshadri@u.nus.edu

Boaz Shacham
The Hebrew University of Jerusalem, Israel
boazshacham@mail.huji.ac.il

Yong Shao
Kunming Institute of Zoology, CAS, China
shaoyong5256018@163.com

Xing Shen
Central China Normal University, China
1130847499@qq.com

Hai-tao Shi
Hainan Normal University, China
haitao-shi@263.net

Akiyama Shigeharu
Seishin Girls' High School, Japan
akiyama@nd-seishin.ac.jp

Jaehyub Shin
Seoul National University, Korea
kuleader@snu.ac.kr

Richard Shine
University of Sydney, Australia
rick.shine@sydney.edu.au

Matthew H. Shirley
Rare Species Conservatory Foundation, USA
mshirley@rarespecies.org

Guo-cheng Shu
Chengdu Institute of Biology, CAS, China
shugcib@163.com

Barry Raymond Sinervo
University of California, Santa Cruz, USA
lizardrps@gmail.com

Ulrich Maria Sinsch
University of Koblenz-Landau, Germany
sinsch@uni-koblenz.de

Guy Sion
Tel-Aviv University, Israel
guy.sion@mail.huji.ac.il

Pablo Ariel Siroski
Proyecto Yacare - CONICET, Argentina
cocokaima@hotmail.com

Adriana Marieke van der Sluijs
Reptile, Amphibian and Fish Conservation the
Netherlands
a.spitzen@ravon.nl

Utpal Smart
University of Texas, Arlington, USA
usmart@uta.edu

Donal Smith
University of Salford, UK
smithdonal@gmail.com

Itzue Wendolin Caviedes Solis
University of Washington, USA
itzuecs@uw.edu

Evgeniya N. Solovyeva
Zoological Museum of Lomonosov Moscow
State University, Russia
anolis@yandex.ru

Jae-Young Song
Korea National Park Research Institute, Korea
song@knps.or.kr

Xiao-wei Song
Xinyang Normal University, China
ShaviSong@126.com

Cäcilia Spitzweg
Senckenberg Natural History Collections
Dresden, Germany
caecilia.spitzweg@senckenberg.de

Gwij Jan Lukas Stegen
Universiteit Gent, Belgium
gwij.stegen@gmail.com

Vaughn Stenhouse
Victoria University of Wellington, New
Zealand
vaughn.stenhouse@vuw.co.nz

Kathryn Stewart
Tongji University, China
stewart.a.kat@gmail.com

Jeffrey Wayne Streicher
The Natural History Museum, UK
J.Streicher@nhm.ac.uk

Jason Layne Strickland
University of Central Florida, USA
jason.strickland@knights.ucf.edu

Waldman Bruce Stuart
Seoul National University, Korea
waldman@snu.ac.kr

Bao-jun Sun
Institute of Zoology, CAS, China
sunbaojun@ioz.ac.cn

Hong-ying Sun
Nanjing Normal University, China
sunhongying@njnu.edu.cn

Li-xing Sun
Central Washington University, USA
lixing@cwu.edu

Yan-bo Sun
Kunming Institute of Zoology, CAS, China
sunyanbo@mail.kiz.ac.cn

Zhong-lou Sun
Anhui University, China
zhonglousun149@163.com

Yik-hei Sung
Hong Kong Baptist University, China
heisyh@gmail.com

Chatmongkon Suwannapoom
Kunming Institute of Zoology, CAS, China
suwannapoom_111@hotmail.com

Dai Suzuki
Kyushu University, Japan
suzuki.dai.0923@gmail.com

Mizuki Takahashi
Bucknell University, USA
mt027@bucknell.edu

Kirara Takano
Seishin Girls' High School, Japan
kirara.ex00@i.softbank.jp

Hirohiko Takeuchi
Kyoto University, Japan
hirohiko@zoo.zool.kyoto-u.ac.jp

Duong Van Tang
Vietnam National Museum of Nature, Vietnam
duongvantang@gmail.com

Xiao-long Tang
Lanzhou University, China
tangxl@lzu.edu.cn

Xin-sheng Tang
Huangshan University, China
xstang@hsu.edu.cn

Ye-zhong Tang
Chengdu Institute of Biology, CAS, China
tangyz@cib.ac.cn

Nguyen Thien Tao
Vietnam National Museum of Nature, Vietnam
nguyenthientao@gmail.com

Shan-Dar Tao
National Pingtung University of Science and
Technology, China
sd80132@gamil.com

Benjamin Tapley
Zoological Society of London, UK
ben.tapley@zsl.org

Rebecca Dent Tarvin
University of Texas at Austin, USA
rdtarvin@gmail.com

Christina Marisa Tellez
University of California, USA
marisatellez13@gmail.com

Korkhwan Termprayoon
Kasetsart University, Thailand
termprayoon_kk@yahoo.com

Sarin Tiatragul
Gonzaga University, USA
puttertp@gmail.com

Moacir Santos Tinoco
Universidade Católica do Salvador, Brazil
moacir.tinoco@ucsal.br

Mamoru Toda
University of the Ryukyus, Japan
gekko@lab.u-ryukyu.ac.jp

Krystal Anne Tolley
South African National Biodiversity Institute,
South Africa
K.Tolley@sanbi.org.za

Hao-jie Tong
China Jiliang University, China
hj_tong2012@163.com

João Filipe Riva Tonini
George Washington University, USA
jfrtonini@gmail.com

Nathan Thomas Tow-Arnett
USA
towar004@umn.edu

Clarence Richard Tracy
University of Nevada, Reno, USA
dtracy@unr.edu

Scott Jerome Trageser
Creative Conservation Alliance, USA
trageser.scott@gmail.com

Susana Clusella-Trullas
Stellenbosch University, South Africa
sct333@sun.ac.za

Nguyen Quang Truong
Institute of Ecology and Biological Resources,
Vietnam
nqt2@yahoo.com

Inn-ho Tsai
Academia Sinica, Taiwan, China
bc201@gate.sinica.edu.tw

Tien-Shun Tsai
National Pingtung University of Science and
Technology, China
t43013@gmail.com

Hui-yun Tseng
National Museum of Natural Science, China
hytseng1216@gmail.com

Wen-hsuan Tseng
National Taiwan Normal University, China
etxkq@yahoo.com.tw

Na Tu
Sun Yat-sen University, China
tuna@mail2.sysu.edu.cn

Oğuz Türkozan
Adnan Menderes University, Turkey
oguz.turkozan@gmail.com

Samuel Thomas Turvey
Zoological Society of London, UK
samuel.turvey@ioz.ac.uk

Shintaro Ueno
University of Tokyo, Japan
shintar.ueno@gmail.com

Peter H. Uetz
Virginia Commonwealth University, USA
uetz@vcu.edu

Katharina Christel Erika Wollenberg Valero
Bethune-Cookman University, USA
Kc.wollenberg@gmail.com

Melita Vamberger
Senckenberg Natural History Collections
Dresden, Germany
mvamberger@senckenberg.de

Anna B. Vassilieva
Lomonosov Moscow State University, Russia
vassil.anna@gmail.com

Gururaja Kotambylu Vasudeva
Gubbi Labs LLP, India
gururaja@gubbilabs.in

Bruno Lomonte Vigliotti
University of Costa Rica, Costa Rica
bruno.lomonte@ucr.ac.cr

Teja Rayavarapu Vijay
Jiwaji University, India
yajivteja@gmail.com

Richard Carl Vogt
Instituto Nacional de Pesquisas da Amazônia,
Brazil
vogt@inpa.gov.br

Judit Vörös
Hungarian Natural History Museum, Hungary
jvoros@nhmus.hu

Jamie Lynne Voyles-Ensor
University of Nevada, Reno, USA
jvoyles@unr.edu

Rune Roverskov Waehrens
Rune Wæhrens, Denmark
rw@exotiskedyr.dk

Ya-qiong Wan
Nanjing Institute of Environmental Sciences,
MEPC, China
qiong1273692100@163.com

Bin Wang
Chengdu Institute of Biology, CAS, China
wangbin@cib.ac.cn

Bo Wang
Kadoorie Farm and Botanic Garden, China
wangbo@kfbg.org

Hai-yan Wang
Chengdu Institute of Biology, CAS, China
wanghy@cib.ac.cn

Hao-ning Wang
Northeast Forestry University, China
994567187@qq.com

Hong-yuan Wang
Shaanxi Normal University, China
hongyuanwang@snnu.edu.cn

Huan Wang
Anhui Normal University, China
1063724321@qq.com

Ji-chao Wang
Hainan Normal University, China
jichao-wang@263.net

Jie Wang
Chengdu Institute of Biology, CAS, China
wjie621@163.com

Kai Wang
University of Oklahoma, USA
kai.wang-2@ou.edu

Lu-yi Wang
National Taiwan Normal University, China
luyiwangtw@gmail.com

Ping Wang
Yibin University, China
229408933@qq.com

Shou-hong Wang
Chengdu Institute of Biology, CAS, China
wangsh@cib.ac.cn

Tong-liang Wang
Hainan Normal University, China
wangtongliang818@126.com

Xiang-jun Wang
Hainan Tropical Ocean University, China
wxj_wangshui@sina.com.cn

Xiao-lan Wang
St. Lawrence University, USA
xwang13@stlawu.edu

Xue-ji Wang
Nanjing Normal University, China
wxj950827@126.com

Ying-han Wang
National Taiwan University, China
monica781025@livemail.tw

Ying-yong Wang
Sun Yat-sen University, China
wyy9156@126.com

Yi-zhang Wang
National Taiwan Normal University, China
hemoparasite@gmail.com

Yue-zhao Wang
Chengdu Institute of Biology, CAS, China
arcib@cib.ac.cn

Yu-fan Wang
Kunming Institute of Zoology, CAS, China
282350057@qq.com

Robert John Ward
University of Kent, UK
rjw53@kent.ac.uk

Georgia Ward-Fear
University of Sydney, Australia
georgia.ward-fear@sydney.edu.au

Daniel Augustus Warner
Auburn University, USA
daw0036@auburn.edu

Gong-qing Wei
Jilin Agricultural University, China
wgq6611@126.com

Guan-nan Wen
Chengdu Institute of Biology, CAS, China
wenguannan@hotmail.com

Martin John Whiting
Macquarie University, Australia
martin.whiting@mq.edu.au

Biense Marinus Wielstra
University of California, Los Angeles, USA
ben.wielstra@naturalis.nl

John J. Wiens
University of Arizona, USA
wiensj@email.arizona.edu

Mark Wilkinson
The Natural History Museum, UK
marw@nhm.ac.uk

Rod Nelson Williams
Purdue University, USA
rodw@purdue.edu

Margaret Adele Wiser
St. Lawrence University, USA
mawise@stlawu.edu

Sally Elizabeth Wren
University of Otago, New Zealand
sewren@gmail.com

Nicole Eden Wright
Wildlife Acoustics, USA
Nicole@wildlifeacoustics.com

Chieh Nicholas Wu
University of Queensland, Australia
nicholas.wu@uq.edu.au

Hai-long Wu
Anhui Normal University, China
whlong@mail.ahnu.edu.cn

Hua Wu
Central China Normal University, China
wuhua@mail.ccnu.edu.cn

Jun Wu
Nanjing Institute of Environmental Sciences,
MEPC, China
wujun@nies.org

Xiao-bing Wu
Anhui Normal University, China
wuxb@mail.ahnu.edu.cn

Yan-qing Wu
Nanjing Normal University, China
wyq0710308@126.com

Ya-yong Wu
Chengdu Institute of Biology, CAS, China
cdwyy201101@163.com

Yi-lian Wu
Chuzhou University, China

Zheng-jun Wu
Guangxi Normal University, China
wu_zhengjun@aliyun.com

Xing-quan Xia
Anhui Normal University, China
quanwei0429@126.com

Yun Xia
Chengdu Institute of Biology, CAS, China
xiayun@cib.ac.cn

Fan-rong Xiao
Hainan Normal University, China
894853011@qq.com

Gang Xiao
Lishui University, China

Xiang-hong Xiao
Northeast Forestry University, China
xiaoxh2010@sina.com

Feng Xie
Chengdu Institute of Biology, CAS, China
xiepeng@cib.ac.cn

Han-bin Xie
East China Normal University, China
xiehanbinsd@126.com

Xin-hong Xie
Yibin University, China
2609567701@qq.com

Yu-lin Xie
Yibin University, China
2285173405@qq.com

Zhi-gang Xie
Zhejiang Normal University, China
xiezhigang@zjnu.cn

Lei Xiong
Wannan Medical College, China
1534551689@qq.com

Wen-hua Xiong
Integrative Zoology, China
iszs@ioz.ac.cn

Chun-zhu Xu
Northeast Agricultural University, China
cxu@neau.edu.cn

Da-de Xu
Zhaoqing University, China
zqxdd@163.com

Takashi Yabe
Aichi Gakusen University, Japan
yabe@gakusen.ac.jp

Nurhartini Kamalia Binti Yahya
Universiti Malaysia Sarawak, Malaysia
nhkamalia@gmail.com

Fang Yan
Kunming Institute of Zoology, CAS, China
yanfang@mail.kiz.ac.cn

Jie Yan
Nanjing Normal University, China
yanjie@njnu.edu.cn

Peng Yan
Anhui Normal University, China
mailyanpeng@126.com

Chen Yang
Chengdu Institute of Biology, CAS, China
yangchen@cib.ac.cn

Chun-kai Yang
National Dong Hwa University, China
610454012@gms.ndhu.edu.tw

Dian-cheng Yang
Huangshan University, China
1037412372@qq.com

Guang Yang
Nanjing Normal University, China
gyang@njnu.edu.cn

Jian-huan Yang
Kadoorie Farm and Botanic Garden, China
jhYang@kfbg.org

Meng-hua Yang
Sun Yat-sen University, China
yangmh25@mail2.sysu.edu.cn

Wei-zhao Yang
Lund University, Sweden
weizhao.yang@biol.lu.se

Yi-ju Yang
National Dong Hwa University, China
treefrog@mail.ndhu.edu.tw

Yu-san Yang
University of Pittsburgh, USA
yusan.yang8@gmail.com

Lv-cheng Yao
Central China Normal University, China
lvchengyao6@163.com

Yun-tao Yao
Hangzhou Normal University, China
yaoyuntaosk@126.com

Hong-yu Yi
Institute of Vertebrate Paleontology and
Paleoanthropology, CAS, China
yihongyu@ivpp.ac.cn

Siriporn Yodthong
Kasetsart University, Thailand
siri_yodthong@yahoo.com

Tatsuya Yoshida
Kyoto University, Japan
yoshida.tatsuya.23r@st.kyoto-u.ac.jp

Natsuhiko Yoshikawa
National Museum of Nature and Science,
Japan
onychodactylus@gmail.com

Zhi-yong Yuan
Kunming Institute of Zoology, CAS, China
yuanzhiyongkiz@126.com

Xi-zi Yue
Chengdu Institute of Biology, CAS, China
lexz@cib.ac.cn

Tamura Yuka
Nagoya University, Japan
yuka.tamu2@gmail.com

Juan Carlos Ortiz Zapata
Universidad de Concepción, Chile
jortiz@udec.cl

Xiao-mao Zeng
Chengdu Institute of Biology, CAS, China
zengxm@cib.ac.cn

Bao-wei Zhang
Anhui University, China
zhangbw@ahu.edu.cn

Dong-ru Zhang
Kunming Institute of Zoology, CAS, China
zhdongru@126.com

Fang Zhang
Anhui Normal University, China
biologyzhf@126.com

Guang-zheng Zhang
Nanjing Normal University, China
zg915@163.com

Guo-jie Zhang
China National GeneBank, BGI, China
zhanggj@genomics.cn

Huan-jia Zhang
Gettysburg College, USA
zhanhu01@gettysburg.edu

Jia-yong Zhang
Zhejiang Normal University, China
zhang3599533@163.com

Jing-yu Zhang
Northeast Forestry University, China
zhangjingyu@foxmail.com

Lin Zhang
Nanjing Normal University, China
lzhangss@msn.com

Li-xia Zhang
Henan Normal University, China
zlx0374@126.com

Mei-hua Zhang
Henan Normal University, China

Peng Zhang
Sun Yat-sen University, China
zhangp35@mail.sysu.edu.cn

Shao-qian Zhang
Sun Yat-sen University, China
zhangshq23@mail2.sysu.edu.cn

Wei Zhang
East China Normal University, China
peter984cn@163.com

Wei Zhang
Central China Normal University, China
zhangwei19876462@126.com

Wei Zhang
Integrative Zoology, China

Wen-ya Zhang
Lanzhou University, China
zhangwenya@lzu.edu.cn

Wen-yi Zhang
Beijing Normal University, China
zhangwenyi322@Gmail.com

Ya-ping Zhang
Chinese Academy of Sciences, China
zhangyp@mail.kiz.ac.cn

Yong-pu Zhang
Wenzhou University, China
zhangypu@126.com

He-ling Zhao
Chengdu Institute of Biology, CAS, China
zhaohl@cib.ac.cn

Jin-hong Zhao
Anhui Normal University, China
jhjzhao@aliyun.com

Lan Zhao
Zhejiang University, China
zhaolanzj@163.com

Mian Zhao
Central China Normal University, China
janel23_we@126.com

Shu-zhan Zhao
Nanjing Normal University, China
zhaosz314@163.com

Tian Zhao
Chengdu Biology Institute, CAS, China
zhaotian@cib.ac.cn

Wei Zhao
Lanzhou University, China
zhaowei@lzu.edu.cn

Wen-ge Zhao
Harbin Normal University, China
zhaowenge311@126.com

Rong-quan Zheng
Zhejiang Normal University, China
zhengrq@zjnu.cn

Xiao-xiao Zheng
Nanjing Normal University, China
wzpyzxx@163.com

Yu-chi Zheng
Chengdu Institute of Biology, CAS, China
zhengyc@cib.ac.cn

Cun-tong Zhou
Nanjing Normal University, China
18268931583@163.com

Hua-xing Zhou
Anhui Normal University, China
hxzhou1987@126.com

Jin Zhou
Nanjing Normal University, China
392876007@qq.com

Wei-wei Zhou
Kunming Institute of Zoology, CAS, China
zhouweiwei@mail.kiz.ac.cn

Bing-hui Zhu
Central China Normal University, China
binghuizhu@foxmail.com

Guang-xiang Zhu
Sichuan Agricultural University, China
gx-zhu@sicau.edu.cn

Yan-jun Zhu
Henan Normal University, China
1049128386@qq.com

Thomas Ziegler
Cologne Zoo/Cologne University, Germany
ziegler@koelnerzoo.de